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MEDICAL HISTORIES

AND

REFLECTIONS.

MEDICAL HISTORIES

AND

REFLECTIONS.

By JOHN FERRIAR, M. D.

PHYSICIAN TO THE MANCHESTER INFIRMARY,
AND LUNATIC HOSPITAL.

Hæc medendi diſciplina ſi cum hypotheticæ ſplendore, faſtu et magnificentia conferatur, tenuis quidem, imo vilis ac contemnenda videbitur. At in illa nihil ſalutaris nec vitalis ineſt, verum mira duntaxat ramorum, foliorumve luxuries, ad aſpectum quidem pulchra, ſed ſtatim flacceſcens, ubi primum eam novitatis gratia tanquam ſuccus defecerit. Hæc vero, cum non ex rebus fictis, commentitiiſque conſtet, non oſtentationis, nec inanis, ſed quæ in curandis hominibus fita eſt veræ, gravis, ſolidæque gloriæ cupida, nec ad oſtentandos flores, ſed ad uberrimos, et jucundiſſimos fructus proferendos comparata, in dies magis, magiſque creſcit, ac vegetior fit.

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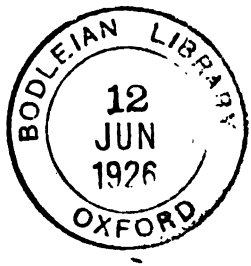
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THOMAS PERCIVAL, M. D.

F.R.S. &c.

DEAR SIR,

THE ceremony of dedication is generally ſo uſeleſs, or ſo humiliating, as to detract conſiderably from the dignity of men of letters. But medical authors, having the good fortune to write for their proper judges, are moſt inexcuſable, if they ſolicit any other patronage than that of profeſſional merit. In giving the ornament of your name to this little book, therefore, I only place my work under its natural protector, a medical philoſopher, zealous for the improve-

improvement of his ſcience, and not leſs diſtinguiſhed by liberality of conduct towards his younger brethren of the profeſſion, than by thoſe qualities which have gained him, in ſo eminent a degree, the confidence of the public.

When I add the conſideration, that I have the happineſs of addreſſing a friend, as well diſpoſed to favour, as entitled to decide the fortune of theſe pages, it is with ſingular pleaſure that I embrace this opportunity of acknowledging myſelf,

DEAR SIR,

Your moſt obliged,

MANCHESTER, Moſley-Street, *April* 30, 1792.

and moſt obedient ſervant,

THE AUTHOR.

THE

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MEDICAL

PREFACE.

THE following pages contain a ſelection of caſes and obſervations, chiefly drawn from my practice at the Mancheſter Infirmary. The extended plan of that inſtitution affords the moſt favourable opportunities to a diligent obſerver, for aſcertaining with preciſion many facts in the hiſtory of diſeaſes, and for appreci-

ating the value of eſtabliſhed methods of cure. Some part of the fruits of ſuch advantages ſhould therefore revert to the public, in acknowledgment of the good it beſtows. And ſomething may be added to the ſtock of ſcience, by unwearied attention to a conſiderable number of patients, indiſcriminately taken, in a great town.

The hiſtory of diſeaſes has been much enriched, ſince the publication of Lord Verulam's Treatiſe on the Advancement of Sciences; in which, with his uſual ſagacity, he has recommended full deſcriptions of the morbid appearances in every diſorder,

diſorder, and careful diſſections illuſtrative of them. From that time, obſervation has been generally purſued, equally as the road to truth and reputation. Whereever the obſerver has delivered faithfully the reſult of a great number of facts, or has poſſeſſed that uncommon talent of concluding accurately from a few particulars to generals, ſcience has been improved, and ſometimes extended. And ſeveral authors preſerve a diſtinguiſhed place in medical libraries, becauſe their deſcriptions of diſeaſes are accurate and intelligible, although their particular ſyſtems, and modes of cure, be in a great meaſure exploded. But the me-

thod, ſo faſhionable at preſent, of publiſhing ſingle caſes, appears not well calculated to enlarge our knowledge, either of the nature or cure of diſeaſes.* On a ſingle inſtance of ſucceſs, however faithfully delivered, no point of practice can reſt; and although minuteneſs in deſcriptions of the natural courſe of ſymptoms is recommended by our beſt ſyſtematic writers, ſince Lord Verulam, yet the great and unneceſſary prolixity of modern caſe-writers could never be intended by them; it is oppoſite, indeed, to the method of every

* Dr. Sydenham has expreſſed the ſame opinion of the inutility of publiſhing ſingle caſes.

author,

author, eminent in this particular. Half a page of Aretæus, Celſus, or Sydenham conveys more circumſtances, and with a more lively impreſſion, to the reader, than many ſheets of languid narration.* One would imagine, that Quintilian was propheſying of the latter ſort of medical ſtyle, in his Chapter De Perſpicuitate. "Eſt etiam in quibuſ-"dam turba inanium verborum, "qui dum communem loquendi

* Neque quidpiam magis hiſtoriæ naturalis medicæ veritatem, fidelitatemque labefactavit, quam libido Auctorum in eadem exornanda, novis et elegantibus loquendi formulis, ſubtilibus ſpeculationibus, copioſis auctorum citationibus, ſimilibuſque Lectorum gratia excogitatis. Bagliv. Prax. Med. p. 172.

" morem reformidant, ducti ſpe-
" cie nitoris, circumeunt om-
" nia copioſa loquacitate quæ di-
" cere volunt."

In the ſucceeding ſelection, the caſes are generally given as briefly as poſſible. My principal aim has been, to conclude, by direct induction from a ſufficient number of facts, reſpecting the effects of certain modes of practice.* I have found, by ſome length of experience, that it is abſolutely neceſſary for a phyſician, who

* If ſome exceptions ſhould appear among theſe caſes, I hope it is chiefly owing to the ſingularity of the complaint deſcribed, or to the neceſſity of elucidating a particular train of ſymptoms in a minute manner.

would

would do juſtice to his patients, to keep a regular account of his ſucceſs in the treatment of difficult diſeaſes.* Some particular combinations, againſt which the ſevereſt mind cannot always guard itſelf, or ſome partial chain of events connected with the exhibition of a medicine, will frequently lead him to falſe conclu-

* Hanc vero remediorum intimiorem cognitionem animo rite concipiendi, vix certior, rectior et compendioſior datur via, ac per obſervationes et morborum hiſtorias, quæ ſimul medicaminum propinatorum uſum, genuinam applicationem et certos effectus recenſent atque complectuntur. Et hinc demum vera, certa et non fallax de remediorum viribus et efficacia, quæ tantopere in deſiderio eſt, experientia, proficiſcitur et medenti innoteſcit. Hoffman, tom. II. ſect. 1. cap. 2.

ſions, if he truſt his memory alone, or neglect long to adjuſt his Adverſaria. The inſtances of good or ill ſucceſs are likewiſe often ſeparated by intervals of time, and other purſuits, which deaden or obliterate the force of compariſon. By ſupporting a journal of the treatment and events of certain diſeaſes, on the contrary, a phyſician ſupplies himſelf with data, on which he can reaſon with confidence, and act with ſatisfaction, in forming a plan of cure for every new patient.

One of the chief obſtacles to accuracy in relating obſervations, has been the unhappy proneneſs of

of medical writers to form ſyſtems. Such gentlemen would do well to read Mr. Locke's chapters on the abuſe of language. A ſyſtem ought to be nothing more than an arrangement of facts, in convenient order for the memory. So far, ſyſtems are neither true nor falſe; it is only of importance that the facts comprehended be true and well told. Yet to the falſe idol of ſyſtem, particular truths, which are our proper objects, have too often been ſacrificed. As I have long ſince reſigned all excluſive preference for any ſyſtem, and contented myſelf with uſing whatever each contains applicable to practice, the freedom of theſe

caſes

caſes will not, probably, be diſputed.

I have endeavoured to avoid many quotations.* When any paſſage of importance occurred to me, connected with a ſeries of my obſervations, I have endeavoured to recal it. But I have been at no pains to aſcertain whether any detached facts had been anticipated. Few claims to originality in medical books can now be ſupported.

* It was ſmartly and juſtly ſaid, however, by Gabriel Naudé (who ſeldom ventured to hold an opinion, for which he could not produce claſſical authority) that they only are averſe to quotations who never expect to be quoted themſelves.

The

The aſſertion of a ſpaſmodic ſtate of the extreme veſſels, in the cold ſtage of fevers, for example, commonly aſcribed to Dr. Hoffman, was firſt made by Dr. Piens, in his comprehenſive Treatiſe De Febre. But when I have entered on the uſe of a medicine, on the authority of any writer, I have always been careful to compare his experience with mine, and to make every neceſſary allowance where a variation appeared. Every man is partial to his own experience, and reckons it ſure; and I have uſed my utmoſt caution not to urge my concluſions beyond the ſtrength of the facts.

The

The Eſſay on the origin of contagious and new Diſeaſes, was written for the Literary and Philoſophical Society of Manchester, and perhaps may be miſplaced in this volume. Its principal object, indeed, is not entirely medical; but as it ſuggeſts a motive for active benevolence, which has been little conſidered before, and involves many topics connected with one part of the obſervations, I have ventured to inſert it, in hopes that its deſign may cover its faults.

Before I conclude, I cannot avoid acknowledging my obligations, for the deſign of this little work, and for ſeveral practical hints

hints purſued in it, to the valuable publications of Dr. HOME. In his *Medical Facts and Experiments*, and his *Clinical Experiments, Hiſtories and Diſſections*, he has pointed out the only certain road to ſolid medical knowledge, and has laboured it with ſucceſs. It is indeed only a freſh opening of the old Hippocratic way; at once decorated and obſtructed by the remains of former writers. A man of ſcience will neither condemn them with the ignorant, as rubbiſh, nor tremble with ſuperſtitious fear to remove them, where their place can be better ſupplied by freſh materials.

MEDICAL HISTORIES

AND

REFLECTIONS.

SINGULAR PARALYTIC AFFECTION.

A STRONG, luſty, middle-aged man was ſuddenly affected with a tingling pain, ſucceeded by numbneſs, in the thumb and fingers of his right hand. In a few minutes, the parts became black, and the pain, extending along the arm and ſhoulder, darted into the right ſide of the mouth, juſt at the angle of the lips. He immediately felt his ſpeech impeded; and he articulated with

with great difficulty, and very imperfectly, till the fit was over, which was completed in the courſe of half an hour. The paroxyſm returned once in two or three hours, obſerving preciſely the ſame courſe. His head was not affected, during any part of its duration, either with pain or giddineſs; nor had any indications of a paralytic diſorder preceded the attack. His bowels were in a regular ſtate. His tongue was white.

I examined his hand with particular care, but could not diſcover any marks of injury about it; and he did not recollect, after repeated inquiries, that it had ſuſtained any violence. I ordered a bliſter to be immediately applied to the outſide of the fore-arm, in the direction of the radius, with the view of ſtimulating the principal nerves ſupplying the fingers, and preſcribed a gentle laxative.

The

The effect of the bliſter was deciſive: as ſoon as it produced an effuſion, the fits left him. Some irregular feelings were afterwards perceived in the fingers, but there was no approach towards another paroxyſm.

A day or two after the application of the bliſter, he complained of a ſlight head-ach, and as his pulſe was very full and ſtrong, I ordered him to loſe twelve ounces of blood from the left arm. This, with a low diet, and attention to his evacuations, completed the cure, and I believe he has now remained well for near two years.

Might it not be uſeful, in caſes of the Aura Epileptica, to apply bliſters near the place where the principal nerves, which go to the part affected, divide?

AN UNCOMMON SPASMODIC CASE, SUCCESSFULLY TREATED.

E. W. a girl of thirteen, had an eruption over the whole ſurface of the ſkin, of an herpetic character, and exquiſitely ſore. She complained alſo of violent pain in her ſtomach, which ſeized her at uncertain times, and was always followed by general convulſions, about the commencement of which her jaws became locked, and could not be ſeparated till the cloſe of the paroxyſm. The duration of the fits was very unequal; generally about three or four hours; but ſometimes a ſucceſſion of them would happen for twenty-four hours, with hardly a perceptible interval.

I gave her ſmall doſes of opium, frequently repeated, during her intermiſſions,

miſſions, but without effect. Her jaws locked ſo ſpeedily after the beginning of the fit, that no medicine could be introduced into the ſtomach during its continuance; and it was evident, that the only hope of a cure reſted on preventing the acceſſion, by remedies exhibited at the firſt ſigns of its approach. I therefore directed her mother, on the appearance of languor and uneaſineſs which preceded the pain, to make her ſwallow a pill, compoſed of half a grain of opium, two grains of muſk, and two of camphor; and to repeat the doſe every quarter or half hour (to a certain extent) according to the progreſs of the fit. After ſome fruitleſs trials, in which five grains of opium were given before the jaws locked, finding the patient ſink very faſt under intolerable and almoſt conſtant agony, I determined to try the effect of the combination in its full extent. At the approach of a fit (the in-

termiſſions of which ſcarcely allowed her time to receive any food) ten grains of opium, a ſcruple of muſk, and a ſcruple of camphor were thrown in. The conſequence was, that the pain was immediately relieved; the jaw did not fix: and the convulſions ceaſed. The irritation on the ſurface was ſo great, that ſhe had very little ſleep during the night; and next day the uſual ſigns of a fit appeared, but an equal doſe of the pills being adminiſtered, the threatening ſymptoms went off, and left her tolerably eaſy. After ſeveral repulſes of this kind, the tendency to renew the paroxyſms gradually ceaſed, and the opiate was proportionably diminiſhed. The eruption decayed in the ſame proportion with the fits; and in a ſhorter time than I had expected, her ſkin was entirely clear, and ſhe was able to work as uſual.

I have occaſionally inquired after her, and found that ſhe has continued perfectly

ſectly well. It is now two years from the attack.

It was very remarkable, that while ſhe uſed ſo large a quantity of opium, the effects of which were ſo powerful on the ſyſtem, ſhe never ſlept above four or five hours together, and then only in the night. I have obſerved the ſame circumſtance in other caſes, where opium has been extenſively employed. And I believe that, with prudence and attention in augmenting the doſes, the fulleſt benefits may be derived from that remedy, without danger or inconvenience.

It muſt be obſerved, however, that fatal conſequences have ſometimes followed the large exhibition of opium. See a remarkable caſe in Dr. Percival's Eſſays Medical and Experimental, vol. I. p. 421. When ſuch doſes are continued for a length of time, it is always proper to interpoſe a laxative

once in two days, and where the ſymptoms are not very urgent, to intermit the uſe of the opium for twelve or twenty-four hours. The ſtate of the pulſe, and every circumſtance indicating the ſtate of the vital functions, muſt be carefully attended to, during ſuch a courſe; and the practitioner muſt always remember, in ſuch caſes, that while a proper degree of boldneſs is neceſſary to effect a cure, temerity may produce an irreparable evil.

REMEDIES OF DROPSY.

I do not remember to have ſeen any compariſon inſtituted among the various methods of reducing the ſwellings, by increaſing the quantity of urine in this diſorder. The whole tribe of diuretics is acknowledged to be

be uncertain, and often to diſappoint the moſt rational expectations. Practitioners are therefore perpetually in ſearch of new remedies belonging to this claſs, and are too apt to over-rate the value of ſuch diſcoveries. An appreciation of the diuretics we already poſſeſs would perhaps be more ſerviceable to medicine, than the addition of any ſingle article of this kind. The following caſes contain ſome facts of this nature, reſpecting a few of the principal remedies employed in dropſy. A ſeries of obſervations, continued on the ſame plan, may perhaps introduce, if not a more ſucceſsful, yet a ſafer mode of practice in this formidable diſeaſe.

DIGITALIS.

HISTORY I.

Sarah Irlam, upwards of ſixty years of age, became gradually anaſarcous,

and when I saw her first was so much swelled, as to be totally unwieldy. Her urine was very scanty. She took one grain of digitalis, and in the course of a few hours voided a great quantity of urine. She took another grain next day, which retarded her pulse, and occasioned violent sickness. The swellings were completely reduced in three or four days.

HISTORY II.

John Wilson, aged twenty-eight, had both ascites and anasarca. His belly and legs were excessively distended, and he had a tormenting cough and dyspnœa. He took one grain of digitalis daily. His urine increased in quantity, but slowly. He then took a grain and half every day, which produced a large flow of urine, steadily supported, and cured him perfectly, to all appearance, in the course of a fortnight. He will be heard of again.

HISTORY

HISTORY III.

Elizabeth Hall, aged thirty-one, had become anaſarcous by ſlow degrees, and the ſwelling began to make conſiderable progreſs. She took half an ounce of the infuſum digitalis twice a day, without any conſiderable effect at firſt; I then interpoſed a grain of gamboge and half an ounce of cream of tartar, once or twice a week, according to the quantity of urine; continuing the digitalis on the other days. The urine now flowed largely; the ſwellings receded, and left her entirely in leſs than three weeks.

HISTORY IV.

John Dawſon, aged fifty-five, affected with aſcites and anaſarca, took one grain of digitalis every day. He was cured of his dropſy in the courſe of a month, and no complaint remained

mained but a cough, which was removed in a few weeks by the common pectoral medicines.

HISTORY V.

James Heys, aged twenty-ſeven, was received into the hoſpital, with anaſarca and aſcites, exceſſively ſwelled, and voiding very little urine. He took one grain of digitalis daily, which promoted a great diſcharge of urine, and he went out perfectly cured in three weeks.

HISTORY VI.

Elizabeth Atherton, aged nineteen, was affected with a conſiderable degree of anaſarca, and an incipient aſcites. She took digitalis in increaſing doſes, to the extent of four grains a day; once or twice a week, a purgative compoſed of gamboge and cream of tartar, in the proportions already mentioned

mentioned, was interpoſed. She was cured in the ſpace of two months.

HISTORY VII.

Ellen Farrar, admitted, April 11, 1791, aged nineteen, had anaſarcous ſwellings of the lower extremities, and a ſcarcity of urine. She complained likewiſe of oppreſſion at her breaſt, of diſturbed ſleep, and ſome degree of orthopnæa. She took one grain of digitalis daily, and occaſional doſes of gamboge and cream of tartar. She was diſcharged, cured, on the twenty-fifth of May.

HISTORY VIII.

Margaret Dewrden, aged nine, was admitted, Auguſt 8, 1791. The abdomen was greatly diſtended, and a ſtrong fluctuation was felt on percuſſion. Her urine was very ſcanty, her *thirſt great*; with a white tongue, and hurried

hurried pulſe, and a teizing cough. She began immediately to take a grain of digitalis every day, in an ounce of infuſum gentianæ compoſitum. The urine increaſed in a day or two, and continued, for ſix weeks, to flow largely; her ſwelling decreaſed, and ſhe had from two to three ſtools daily. She was diſcharged, cured, in the following December.

HISTORY IX.

Elizabeth Bailey, aged twenty-five, was one of the unfortunate perſons on whom a large manufactory fell, in winter, 1791. She received a ſevere blow from a large piece of timber, on the left ſide of the cheſt, and was otherwiſe bruiſed, in conſequence of which ſhe was under the care of a ſurgeon for ſome time. When I admitted her, on the thirtieth of May, her legs and feet were much ſwelled; ſhe

ſhe was thirſty, had a cough, and was ſubject to orthopnœa, particularly in the night. Her ſleep was broken; ſhe often complained of oppreſſion and pain in her breaſt, and of pain about the middle of her left arm, which was always aggravated, when her breaſt was moſt uneaſy. Her face, at ſuch times was ſlightly œdematous. Her urine was diminiſhed in quantity. On the third of June, ſhe began to take one grain a-day of digitalis. Her ſwellings then leſſened, and her urine, in general, was much increaſed. A violent head-ach made bliſters behind the ears neceſſary, on the fifteenth of June; and the pain in her ſide and left arm became ſo troubleſome, on the third of July, that a bliſter was then directed to her ſide. And as ſhe complained of coſtiveneſs and flatulence, which even produced the globus hyſtericus, about the end of June, the ſtomachic or fœtid pills were occaſionally given

given, and a vomit was once directed. But the uſe of the digitalis was ſteadily purſued without augmentation, till the twenty-ſecond of July, when all her ſymptoms were ſo much mitigated, that I conſented to her deſire of leaving the houſe. The ſwellings were completely reduced, and the pains little, if at all troubleſome. I believe ſhe has ſince relapſed.

HISTORY X.

John Rowbottom, aged ſixteen, was admitted on the ſeventh of March, 1791. His complaint was of conſiderable duration. The belly was much enlarged, with a ſenſible fluctuation; the legs and feet anaſarcous, and the face œdematous. His urine was deficient, his tongue white, and his thirſt exceſſive. A florid circumſcribed redneſs of the cheeks, accompanied him through the whole diſeaſe, and

and he complained of a cough. But his pulſe was tremulous and jarring in a moſt extraordinary degree, and finding, on inquiry, that he had been long ſubject to diſtreſſing palpitations of the heart, I examined its motion with attention. On applying my hand to the uſual place, I found a great expanſion of the pulſation every way: the apex could be felt diſtinctly to ſtrike between the eighth and ninth ribs. He now told, that the palpitations had preceded the ſwellings; that he had often felt pains ſtriking acroſs his breaſt; and had ſometimes diſcharged a little blood by the mouth. He was put upon a courſe of digitalis, beginning with a grain a day, and two days afterwards was ordered the uſual doſe of gamboge and cream of tartar. This did not operate, and I found it neceſſary to give four grains of gamboge and half an ounce of cream of tartar, which purged him from four to ſix times.

times. Half the quantity of gamboge anſwered afterwards. No remarkable benefit was derived from his medicines for ſome time. His habit was very coſtive, and the purgative was ſo often required, that the regular uſe of the digitalis was not begun till the middle of April. His ſwellings then began to give way; he took at laſt two grains daily. On the fifth of June, he was almoſt entirely emptied; and was then made an out-patient, at his own earneſt requeſt. The dilatation of the heart did not ſeem to proceed with much rapidity. Little difference could be perceived in it, when he left the houſe. On the fifteenth of September, he applied to me again, and was re-admitted. His ſwellings were now much greater, and his difficulty of breathing was very harraſſing; the ſcrotum was diſtended to ſuch a degree, that the penis was almoſt buried. His urine was again ſcanty. The heart now ſeemed more dilated,

dilated, and the pulſation felt more remote. His ſcrotum was immediately ſcarified very gently, and the following bolus was ordered to be taken at bed-time;

R. Pulv. Scill. arid. gr. v.
—— Jalap. gr. vi.
Calomel. gr. ii. Confer. Roſ. q. s. M.

On the ſixteenth, his ſcrotum was reduced by draining, and his urine was increaſed. The bolus had purged him thrice. He was every way eaſier. On the ſeventeenth, the ſmall inciſions on the ſcrotum were healed; but as his urine flowed ſtill more freely, I truſted to the bolus, which had been given every night, and generally produced about two ſtools in twenty-four hours. His ſwellings then abated, and his legs and ſcrotum were completely emptied.*

* For the event of this caſe, ſee, *Dilatation of the Heart.*

HISTORY XI.

Ellen Wyatt, aged fifty-eight, was admitted on the fifteenth of Auguſt, 1791. Her abdomen was diſtended, and a fluctuation was perceptible. Her urine was ſcanty. She was ordered the digitalis in the uſual manner, with the interpoſition of the pulvis purgans. She now took two grains of digitalis a-day, her urine increaſed, and the ſwelling of the belly was very ſenſibly leſſened. On the fifteenth of September, ſhe complained, for the firſt time, of ſwellings in her legs. She was then again ordered the pulvis purgans. On the twenty-ſecond, the ſwellings of the legs were gone, but ſhe complained of frequent ſickneſs and laſſitude, and her pulſe was much ſlower. The digitalis was therefore omitted, and the bark electuary ordered in its ſtead. On the twenty-ninth, ſhe was more ſwelled, and her urine was more ſcanty. She was

was again ordered a doſe of the pulvis purgans, and one grain of digitalis a day. She was afterwards put on a courſe of cream of tartar, ſometimes in ſolution, ſometimes combined with gamboge, and is now much better.

HISTORY XII.

James Lees, aged fifty-three, was admitted with aſcites and anaſarca, on the twelfth of September, 1791. He was ordered one grain a-day of digitalis, and as he was much emaciated, the bark was joined to it. On the nineteenth, his urine was increaſing. He was then ordered two grains of digitalis daily; his urine flowed in conſiderable quantity, his ſwellings were leſſened, and he was diſcharged, cured, on the twenty-fourth of October.

HISTORY XIII.

John Wilſon, whoſe firſt attack was narrated in hiſtory the ſecond, applied to

me again, on the fifteenth of June, 1790. His ſwellings were now as great as ever, and his countenance denoted greater anxiety. I gave the digitalis again, in ſuch doſes as to produce a ſtrong narcotic effect, without being able to increaſe his urine. A variety of other diuretics, tried in ſucceſſion, proved equally unſucceſsful. The event of the caſe I do not know, for he was ſoon removed to the work-houſe.

HISTORY XIV.

William Williams, aged ſixty, admitted February ſecond, had been ill for ſome time. He was afflicted both with anaſarca and aſcites. He made very little water; his countenance was cadaverous, his pulſe low; and he often complained of pain in his right ſide, ſtriking upwards to the top of the right ſhoulder. He took the digitalis in increaſing doſes, without any effect, for

for ſome weeks. When he took four grains a day, his pulſe was rendered ſenſibly ſlower, and he became very drowſy. I therefore ſtopped at that quantity, and continued the ſame doſe every day for a week longer. But the narcotic effects were ſo continued, that I durſt go no farther. His urine was never increaſed by it. The ſequel of this caſe comes under another remedy.

HISTORY XV.

Betty Williamſon, aged thirty, admitted Nov. 9, 1789, was anaſarcous in her lower extremities, and there was reaſon to fear the approach of aſcites. She had a violent cough, and a large expectoration, which had ſome appearance of pus. She took the digitalis as uſual: it produced in a few days, violent ſickneſs and vomiting, but did not leſſen her ſwellings. I therefore diſcontinued its uſe.

HISTORY XVI.

Ellen Jones, aged ſixty, admitted in March, 1789, was anaſarcous, with the uſual attendance of cough and thirſt. She took the digitalis, like the reſt, for a month, without any ſenſible difference in the ſtate of the urine or ſwellings.

HISTORY XVII.

Job Bowers, aged thirty-ſeven, admitted Dec. 27, 1790, of a cachectic appearance, was affected with aſcites and anaſarca, attended with the uſual ſymptoms. He began with a grain of digitalis, and proceeded to two grains a day, which he continued to take during a fortnight, without relief. It was then diſcontinued.

HISTORY XVIII.

William Waters, aged twenty-three, was admitted on the twenty-ſixth of September,

September, with an incipient aſcites. He took the infuſum digitalis, to the extent of five or ſix ſpoonfuls a day, by a gradual augmentation. This quantity brought on a large flow of urine, and his belly diminiſhed. He was much emaciated, when I firſt ſaw him, and had a caries in the bones of the carpus of the right hand. In the middle of October, he was attacked with feveriſh ſymptoms, and complained of a ſore throat. On inſpection, a dark-coloured inflammation appeared in the fauces. He was ordered bark, and aſtringent gargles, and ſoon got better; but he looked extremely ill, his belly filled again, and his lower extremities became anaſarcous. The digitalis was now repeated, and a tonic courſe joined with it. His urine again flowed largely, but the ſwellings were not leſſened. In the beginning of November he was attacked by a ſudden pain in his bowels, on which the former courſe was

ſuſpended, and opiates were given. The pain went off in the courſe of the day, and the ſwellings diſappeared. But a few days afterwards, his right thigh became eryſipelatous, and in ſpite of the liberal uſe of bark and wine, the affection extended to the groin, and ended his exiſtence on the eleventh of November. I could not obtain leave to inſpect the body.

HISTORY XIX.

Mary Rowley, aged thirty, admitted February 12, 1791, had the uſual ſigns of aſcites. She took two grains a-day of digitalis for near a fortnight. She grew worſe, and the remedy was dropped.

HISTORY XX.

Mary Sudworth, aged twenty-one, admitted March 14, with evident ſymptoms

toms of aſcites and anaſarca, took two grains of digitalis a-day, for a week, but became worſe, and the courſe was changed.

HISTORY XXI.

Elizabeth Oldham, aged forty-eight, admitted June 20, 1791, with aſcites, took the digitalis with the pulvis purgans, in the manner already deſcribed. She found no relief, and in a month the remedy was diſcontinued.

HISTORY XXII.

Elizabeth Williamſon, aged ſixty, admitted July 11, 1791, ill of aſcites, was ordered the digitalis and pulvis purgans as uſual. She took them for a fortnight, but without benefit.

HISTORY XXIII.

George Newton, aged ſeventy, admitted January 24, 1791, with aſcites and

and anaſarca, took the digitalis as uſual. His urine did not increaſe; but ſymptoms of gangrene appeared in the lower extremities, and he died on the thirtieth of the ſame month. On diſſection, the abdomen was found full of water; the liver appeared ſoft and pale; the pleura, on the ſurface of the lungs, bore marks of inflammation, and adheſions were formed to the parietes of the cavity: there was a conſiderable quantity of water in the thorax.

HISTORY XXIV.

William Taylor, aged nineteen, admitted May 30, 1791, with aſcites and anaſarca, was ſo much loaded with water, as to be in conſtant danger of ſuffocation. He was put on a courſe of the pulvis purgans and digitalis, but without effect. The accumulation increaſed; his cheeks and lips became livid;

livid; and it was neceſſary to tap him, to prevent inſtant death. Accordingly the operation was performed on the third of June, and a very large quantity of water drawn off. He appeared ſomewhat eaſier the next day, but languid. He began to fill again; mortification took place in the ſcrotum, which was greatly diſtended; and he died on the ſeventh of June.

I have no notes of the diſſection, but I recollect that the liver and kidneys were greatly diſeaſed. The cheſt was full of water. A ſingular circumſtance attended the operation, of which I have prevailed on Mr. Simmons, the operator, to draw up an account. It follows, in his own words.

"I tapped William Taylor for an "aſcites, at the requeſt of Dr. Ferriar, "in the uſual part of the abdomen; "carefully examining the part where "the

" the trocar was to be introduced, to " avoid wounding any conſiderable " blood-veſſel. A large quantity of " watery fluid was evacuated, and to- " wards the concluſion of the diſ- " charge it was tinged of a reddiſh " colour. On withdrawing the ca- " nula, I was much alarmed with the " appearance of a conſiderable flow of " blood, expecting no leſs than the " immediate death of my patient, from " his very debilitated ſtate previous to " the operation. The colour, how- " ever, reſembled that of venous blood, " and I found the effuſion was ſtopped " by compreſſion. Styptic applica- " tions were therefore made, and the " compreſſion was continued for ſome " time, which had the deſired effect.

" On inſpecting the body after " death, which happened in a few " days, I had the ſatisfaction to find, " that not the ſmalleſt quantity of " blood

" blood had been poured out into the " cavity of the abdomen; and that " neither inflammation nor gangrene " had come upon the wound from the " uſe of the aſtringent application. " The cauſe of the hæmorrhage was " now apparent. The epigaſtric artery " with its accompanying vein running " out of their uſual courſe, the latter " had been divided, and ſo near to the " former, that there was not more " than the ſpace of a line between the " wound made by the trocar and the " coats of the artery.

" This caſe has induced me to think " the operation of the paracenteſis of " the abdomen not ſo trifling as it is " generally believed to be; and the " late obſervations on this ſubject by " Dr. Smith and Mr. Ford, contained " in the ſecond volume of the Medical " Communications, corroborate opi- " nions I had formed previous to my " ſeeing that publication.

" Chirurgical

" Chirurgical writers have differed " conſiderably in their opinions of the " proper part for making the puncture " in caſes of aſcites. Celſus recom- " mends the water to be evacuated at " the navel, or nearly four fingers " breadth below it, inclining to the " left ſide, and when performed in the " latter manner, he adviſes it to be " done with circumſpection, leſt a " blood-veſſel ſhould be opened.

" Succeeding writers deviated from " this ancient practice, and made the " puncture, when below the navel, " either on the right or left ſide, and " at the diſtance of the breadth of " three or four fingers; and, ſome- " times, at the ſame diſtance immedi- " ately below the navel. Deviations " from theſe modes of practice have " been introduced by the more modern " ſurgeons; for ſome, apprehending " the ancient practice to be laid down

" without

" without attention to the diſtended
" ſtate of the cavity of the abdomen,
" recommend it to be done at the
" diſtance of ſeven or eight fingers
" breadth, deſcending obliquely from
" the navel, which they ſay will not
" be more than equal to four when the
" belly is returned to its natural ſtate.
" This ſeems to agree with the direc-
" tions given by chirurgical writers of
" the preſent day, who order the open-
" ing to be made midway between the
" ſpine of the ileum and the umbilicus.

" As the preſent mode of practice is
" liable to ſuch ſerious conſequences,
" and is recommended early in the
" diſeaſe, not only to relieve preſent
" diſtreſs, but with a view to aid the
" power of internal remedies, it be-
" comes of importance to the art of
" ſurgery, if poſſible, to amend it.

" The

" The fluid has been evacuated at " the navel, only when there has been " a particular ſwelling there, and an " evident fluctuation under the thin " integuments.

" It has been performed at the diſ- " tance of four fingers breadth from " the navel, on the right or left ſide, " as circumſtances indicated, to avoid " the recti muſcles; but in the diſ- " tended ſtate of the abdomen it would " nearly get into them, and, there- " fore, do juſt the reverſe of what " was intended. From particular opi- " nions reſpecting the diſeaſe, it was " propoſed by Albucaſis, Avicenna " and others to make the opening at " the ſame diſtance directly below the " navel; but this was afterwards diſ- " carded from phyſiological opinions " reſpecting the nature of tendons. " From the moſt attentive conſidera- " tion I am able to give the ſubject,

" I am,

"I am, notwithſtanding, of opinion "that this is the part in which it "ought to be performed. In this way "common integument, tendinous ex- "panſion, and the peritoneum only, "are, in all probability, divided; and "in the preſent mode, if rightly per- "formed, I think alſo no other parts "are divided, for I agree with Le "Dran that the middle ſpace between "the navel and the criſta of the os "ileum which is exactly between the "fleſhy part of the oblique and tranſ- "verſe muſcles, or what we call the "linea ſemilunaris, ought to be the "part perforated.

"In the caſe related, the puncture "was made in this part, upon the edge "of the above-mentioned muſcles.

"The epigaſtric artery comes off "anteriorly from the external iliac, "and running obliquely upwards,

" reaches the poſterior part of the " rectus muſcle, about two or three " fingers breadth above the os pubis, " in the direction of which it is con- " tinued till it forms an anaſtamoſis " with the mammaria interna. This " is its uſual courſe: but as nature is " often ſportive in the diſtribution of " arteries, it is adviſeable to guard " againſt her incidental variations as " much as we can. Now we know " from experience, that it ſometimes " does run in the part where the trocar " is uſually introduced. And the part " itſelf muſt ſomewhat vary, according " to the opinions of different men, the " language not being abſolutely defi- " nitive. But, if it is performed in " a direct line, at a given diſtance " below the navel, every man of com- " mon ſagacity muſt perform it with " the greateſt exactneſs; and I do not " know of the artery ever having been " obſerved exactly in that direction.

" It

"It is ſaid that the wound heals "better, if the perforation is made "where there are ſome muſcular "fibres; but if there is ſufficient "muſcle to expedite that proceſs, "there muſt alſo be blood-veſſels, "which being opened, might occaſion "the loſs of more blood than a patient "under ſuch circumſtances could bear. "And, beſides, from the authorities "above quoted, as well as that of "Fabricius ab Aquapendente and our "own knowledge, much need not be "apprehended on that account.

"I propoſe then, that the operation "ſhall be performed in this part in "preference to that where it is uſually "done, in all caſes where there is a "general diſtenſion of the cavity of "the abdomen from a watery fluid, "and there are no ſymptoms to war- "rant an opinion of any of the viſcera "being ſo much enlarged as to be in

"danger of injury from the inſtru-
"ment."

CREAM OF TARTAR.

I have always directed this remedy to be given in Dr. Home's method: from half an ounce, diſſolved in ten ounces of water, to an ounce, or an ounce and half daily.

HISTORY XXV.

Mr. C. about forty years of age, conſulted me for a complaint in his breaſt. He was ſenſible of conſtant weight and oppreſſion; he ſlept ill, and frequently awaked in terror; he had a ſlight cough; his breathing always became difficult, when he walked up an aſcent; his urine was ſcanty; and he had, at times, a pain about the middle of the left arm. His legs were ſlightly

ſlightly anaſarcous; his face was œdematous, and his countenance anxious. He was thirſty, and had a frequent, irregular pulſe. I ordered him the cream of tartar, to be taken next morning. I ſaw him in the afternoon of the next day, and found that his urine had increaſed from about half a pint in the day, to a pint and half. He ſtaid in town a day or two longer, that I might obſerve the effect of the medicine, and finding his urine flow more and more freely, he returned to the country, with a reſolution to try the plan with perſeverance. He had uſed a variety of medicines before, without any advantage. I heard from him often, and for ſeveral months received accounts of a gradual amendment. His urine, for ſome time, came off in greater quantity than natural; afterwards it returned to its uſual ſtate. All his uneaſy ſymptoms diſappeared, and, as he wrote me, after being un-

able to creep above a mile, he could now walk three or four miles, over any kind of ground, without inconvenience. This agreeable change continued for near twelve months, but at the end of that time, his ſymptoms returned. He had recourſe again to his cream of tartar, but I do not know with what immediate effect. I heard of his death ſoon after.

HISTORY XXVI.

A poor woman, who had become dropſical and aſthmatic by hard labour and ill uſage, applied to me in 1788. I have no notes of the caſe, but I remember that ſhe took the cream of tartar, and that her ſwellings were, for the time, entirely removed.

HISTORY XXVII.

Peter Nield, aged forty-five, admitted November 11, 1789, was anaſarcous. He

He took the cream of tartar, and ſoon began to void a large quantity of urine, and to perceive a decreaſe of the ſwellings. As the medicine operated much by ſtool, however, he became very feeble, and I found it neceſſary to ſupport him liberally, at the ſame time, with tonics. He was diſcharged, cured, in a few weeks.

HISTORY XXVIII.

Thomas Mather, aged twenty-five, was affected with eryſipelas and ſwelling of both legs, in October, 1791. When the eruption went off, he began to ſwell generally. At the commencement of my attendance, November eighteenth, his legs were exceſſively diſtended, his belly was very large, and his face œdematous. He had taken ſome purges of jallap with mercury, and felt ſomewhat eaſier, but his ſwellings were increaſing. I ordered him the

cream of tartar. Next day, he had ſeveral watery ſtools, and his belly was leſs. On the twenty-ſecond he continued to have four or five watery ſtools a-day, he paſſed more urine, and his belly was fallen in circumference ſeveral inches. He now walked about with eaſe and alacrity. On the twenty-ſeventh, he had only one or two ſtools in the day, and made but little water, yet his ſwellings continued to decreaſe. The cream of tartar was therefore increaſed to ſix drachms a-day. It ſeldom produced above two ſtools a-day; his ſwellings went entirely off, and he was able to go to work again on the thirteenth of December.

He relapſed from imprudence, and came under my care again in the courſe of a few weeks. He recovered by a repetition of his medicine.

HISTORY

HISTORY XXIX.

Catherine Duny, aged twenty, admitted about the beginning of January, 1790, had aſcites; and towards evening, had ſome degree of ſwelling in her ancles. She was put on a courſe of cream of tartar, and was diſcharged, cured, in three weeks.

HISTORY XXX.

Ann Wagſtaff, aged twenty-five, anaſarcous, admitted January 25, 1790, took the cream of tartar, and was diſmiſſed, cured: my notes do not ſhew at what time.

HISTORY XXXI.

John Hopwood, aged forty-eight, had been ſubject for ſeveral years to ſevere pain in the head, and occaſionally to giddineſs. About a year before he

he conſulted me, he began to complain of a dry cough, which increaſed till the beginning of winter, 1791, when I ſaw him. His legs were then much ſwelled, and pitted on preſſure; his abdomen was conſiderably enlarged, with a conſiderable degree of fluctuation; his urine was ſcanty, he complained of thirſt, and had a very troubleſome orthopnæa. I put him on the uſe of cream of tartar. In three days, he made half a pint of urine more in the day, and his ſwellings decreaſed. At the end of a fortnight, the ſwellings were nearly gone, the cough and orthopnæa greatly relieved, and every appearance promiſed a cure. But the pain in his head, which had been eaſier for ſome time, ſuddenly returned, and he became blind. At the ſame time, his extremities were affected with a degree of paralyſis. He was now ſo much diſcouraged, that he refuſed to take any more medicines, and ſunk by degrees

degrees till he expired, with a livid countenance, and every mark of an oppreſſed brain. I could not obtain permiſſion to inſpect the body.

HISTORY XXXII.

Elizabeth Monk, aged forty-five, had a dry, vexatious cough for above three years. She had ſo great a degree of orthopnæa, that ſhe was commonly unable to lie down in bed; her urine was ſcanty; her face often ſwelled, and at ſuch times her cough and difficulty of breathing were moſt troubleſome. She often felt an uneaſy tingling in her left arm and hand. There was a ſtrong expreſſion of anxiety in her countenance. I ordered her the cream of tartar, which produced four or five looſe, watery ſtools a-day, and an almoſt immediate increaſe of urine. Her ſymptoms were gradually relieved, and at the end of a month,

ſhe

ſhe is free from every complaint, excepting ſome degree of cough.

HISTORY XXXIII.

Jeremiah Wood, aged forty-two, admitted April eighteenth, anaſarcous, took cream of tartar without any ſenſible advantage. He died on the twenty-ſixth of the ſame month.

On diſſection, the cheſt was found full of water, the lungs adhered ſtrongly to the left ſide of the thorax, and the pericardium was firmly united to the heart.

BACHER'S TONIC PILLS.

I believe practitioners in this country have had little experience of this remedy. Dr. Cullen ſays, in his Materia

teria Medica, that he had never heard of any perſon who thought well enough of the formula to uſe it. Prejudice, however, is never to be encouraged: in the ſcarcity of good diuretics I have been induced to employ this highly recommended formula, and have found no reaſon to think lightly of it.

HISTORY XXXIV.

William Williams (ſee Hiſtory XIII.) after diſcontinuing the digitalis, began to take nine of the tonic pills daily. They produced an immediate flow of urine, and ſeveral watery ſtools every day. His belly diminiſhed conſiderably in ſize, but his legs, during the courſe of digitalis, had become ſo much diſtended, that a rupture of the ſkin took place in each, and the water drained away in great quantities. He now emptied a-pace, but grew weaker from

from day to day. The pills were continued, but a quantity of wine and of tincture of bark was allowed, ſufficient to ſupport his pulſe, and the pills were managed ſo as to prevent any conſiderable purging. The openings in his legs preſerved a healthy inflammation round their edges; but no art could relieve the languor occaſioned by withdrawing the preſſure of the water; and he died as ſoon as he was nearly freed from the ſwellings.

HISTORY XXXV.

Sarah Hartley, aged twenty-nine, came under my care, after ſhe had been during three months the patient of another phyſician. She was affected with aſcites and anaſarca; her urine was ſcanty; and her countenance was livid. She took ſix of the tonic pills daily; they produced an increaſe of urine,

urine, and in three weeks occaſioned a conſiderable diminution of the ſwellings. But ſhe became languid, her ſtrength ſeemed to decay with the diſeaſe, and on December ſecond, ſhe was ſeized with a looſeneſs, at the approach of which the pills were laid aſide. Aſtringents and opiates were now employed, but to little purpoſe. The Diarrhæa was attended with a fixed pain in the bowels. She ſunk gradually, and died December 6, 1790.

On diſſection, ſome turns of the ileus were found affected with a dark red inflammation. The liver was ſoft and pale; the kidneys were enlarged, and ſuppurations appeared in the pelvis of each. There was water in the cheſt, and adheſions were formed between the pleura and the ſurface of the lungs.

HISTORY XXXVI.

Alice Wrigley, aged fifteen, was admitted, May ninth, with anaſarca and an incipient aſcites. She took three of the tonic pills thrice a-day. They increaſed her urine to a conſiderable quantity; the ſwellings abated, and ſhe was diſcharged, cured, on the ſixteenth of the following October. Her attendance had been irregular.

HISTORY XXXVII.

Anne Waring, aged twenty-three, had aſcites and anaſarca. She took fifteen of the tonic pills every day, which produced a great increaſe of her urine, and ſhe was diſcharged, cured, in four months. She had been very irregular in taking the medicine, and once abſented herſelf from attendance, and

and relinquiſhed the uſe of the pills, for three weeks together.

HISTORY XXXVIII.

Betty Clay, aged forty-ſix, had aſcites. Her urine was very ſcanty. She took for eight months, thirty-five drops of ſpiritus ætheris nitroſi, thrice a-day, with the effect of an increaſe in the quantity of urine, and a ſlow abatement of the ſwelling. But this effect at length ceaſed, and her legs began to ſwell. I then ordered the tonic pills. When ſhe began to take fifteen a-day, her urine again flowed largely, and the ſwellings were reduced. She then took twenty pills daily, with a farther abatement of the ſymptoms. At preſent, the ſwelling of the abdomen is nearly gone, and her only remaining complaint is a troubleſome cough.

HISTORY XXXIX.

Job Bowers (Hiſtory XVIII.) took the tonic pills, for ſome time after the digitalis was given up, but without relief.

HISTORY XL.

Mary Winterbottom, aged fifty-eight, admitted Auguſt 15, 1791, with aſcites, began to take twenty of the tonic pills every day. The effects were, a conſiderable increaſe of urine, and many watery ſtools. She diminiſhed in ſize very regularly, and was diſcharged, completely cured, on the eighteenth of October.

PULVIS DOVERI.

This remedy has been uſed with ſucceſs in dropſical caſes, by Dr. Hamilton

milton of Edinburgh; ſome inſtances of which I ſaw, during my attendance on him at the Infirmary of that city.

HISTORY XLI.

William Kay, aged twelve, admitted November 9, 1789, had become anaſarcous in conſequence of expoſure to cold. He was ordered to uſe the pediluvium, and afterwards to take a ſcruple of Dover's powder. The firſt doſe did not ſucceed, owing to ſome miſmanagement of the patient. A ſecond doſe was given, which ſweated him profuſely, and reduced his ſwellings. He was then directed to take the bark, and was diſcharged, cured, in leſs than a week.

GAMBOGE WITH CREAM OF TARTAR.

HISTORY XLII.

Job Bowers (Hiſtory XVIII. and XXXIX.) when oppreſſed with extreme

treme difficulty of breathing, took from one to two grains of gamboge, with half an ounce of cream of tartar, every two or three days. It always produced from four to ſix watery ſtools, lowered his ſwellings, and relieved his breathing. Whenever the exhibition of his purgative was delayed beyond the uſual time, all his ſymptoms were greatly aggravated. At length, however, his urine was totally ſuppreſſed, which was ſoon followed by death. I did not obtain permiſſion to open the body.

GAMBOGE WITH MERCURY.

HISTORY XLIII.

Hannah Wolſtenholme, anaſarcous, took ſix grains of calomel, with one grain of gamboge, twice or thrice a-week, according to the degree of evacuation

evacuation produced. It increaſed the quantity of urine immediately, and ſhe was completely well in a fortnight.

CALOMEL WITH SQUILLS.

HISTORY XLIV.

Thomas Jelly, aged thirty-eight, was admitted Auguſt 15, 1791. The abdomen was greatly diſtended, with evident fluctuation, and his lower extremities were anaſarcous. He paſſed very little urine; had a conſtant difficulty of breathing, dry cough, and a tormenting thirſt. He took ſome of the common diuretics,* without relief, till the twentieth. He was then ordered the pulvis purgans, which gave him ſome motions, but did not increaſe

* P. Digitalis among the reſt.

his urine. On the twenty-ſecond he was ordered the following bolus:

℞. Sapon. Hiſpan. ℈i.
Pulv. Scill. Arid. gr. x.
Calomelan. gr. iij.
Opii gr. j.
Conſerv. Roſ. q. s. Miſce.

This increaſed his urine immediately, and purged him gently. Between the twenty-third and twenty-eighth, he ſometimes paſſed upwards of three quarts of water in twenty-four hours. At the latter period, the purgative effect was ſo far loſt, that it was neceſſary to order him the pulvis purgans. His mouth now became affected, and on the thirty-firſt, at which time he had taken exactly twenty-one grains of calomel, his gums and the inſide of the mouth were ulcerated, and a ſpitting came on. He was then much reduced in ſize. On the thirty-firſt his bolus was repeated, without the calomel. While the ptyaliſm laſted, his

his water came off freely, but when his mouth began to heal, the quantity decreaſed, and the ſwellings returned. At this period his appetite was voracious to ſuch a degree, as to make him uneaſy in his mind. He ſpoke of it ſeveral times with anxiety. On the eighth of September, his mouth was well, and he was nearly as bulky as ever. The calomel was therefore again added to the bolus; he was allowed porter, and put upon full diet. On the ſixteenth he had taken ſeven boluſes, containing exactly twenty-one grains of calomel. He had always been purged at leaſt three times a-day by the bolus, and had parted with great quantities of water. His mouth was now very ſore, again: the bolus was therefore omitted; and in two days, a conſiderable degree of ſalivation took place. But the ſwellings of his legs were completely removed, and his belly was reduced very nearly

to its natural ſize. On the twenty-third his mouth was ſtill extremely ſore, and as the weather became cool, he was ordered the electuarium e ſulphure. On the twenty-ſeventh, his mouth was ſomewhat eaſier, but he ſtill ſpit much, and was very weak. He was then allowed four ounces of wine a-day, in addition to his porter.

On the thirtieth, he was ſeized with a violent looſeneſs, the ſpitting decreaſed, and his belly enlarged again. The urine was now much leſs in quantity. He was ordered aſtringents with laudanum. The next day, his purging was ſtopt, and the abdomen ſo far returned to a natural ſtate, that though it appeared full, he could retract it as completely as a man in health uſually does. His mouth was perfectly well in a few days, but he continued weak. In the firſt week of October, he was ſeized with a violent cough,

and

and complained of univerſal pains. The looſeneſs returned, and his belly increaſed again in ſize. On the tenth, he was ſo much altered that it was evident death was approaching. He complained that his ſtomach would retain nothing; his pulſe became low, and faltering, and he had frequent cold ſweats. On the eleventh, he was inſenſible, and ſeemed to be dying, but he lingered in that ſtate, till the morning of the thirteenth, and then expired.

The body was opened next day. A quantity of water was found in the cavity of the cheſt, chiefly, on the right ſide. The right lobe of the lungs adhered ſtrongly to the pleura, and there were marks of inflammation on its ſurface. There was an adheſion alſo on the left ſide. The pericardium contained a good deal of water, and adhered to the forepart of the right ventricle; the heart was larger than natural.

A great

A great quantity of clear, brown-coloured water was found in the abdomen. The liver was enlarged, hardened, and diſpoſed to ſcirrhoſity. The pancreas was indurated, and altered in its texture. The ſtomach was uncommonly ſmall, and the blood-veſſels on both curvatures were much diſtended; near the cardia, it was eroded by the gaſtric juice. The omentum was preternaturally red. Several turns of the ileus appeared diſcoloured, and on opening them, the villous coat was found greatly inflamed. This inflammation was traced into the tranſverſe arch of the colon. The ſpleen was ſound: the left kidney was larger than natural, but otherwiſe ſound. The right kidney was in a natural ſtate.

NICOTIANA.

HISTORY XLV.

Mary Coxe, aged twenty-nine, complained of pain and ſwelling on the left ſide of the abdomen; of thirſt, and ſcarcity of urine. On examination, a large tumor on that ſide appeared, extending from the ſpine of the os ileon, almoſt to the oſſa pubis. The edges were well defined, but the ſurface, though unequal, was yielding, in ſome degree, and gave the impreſſion of a contained fluid. Before I ſaw her, ſhe was ordered from twenty-five to thirty drops of the infuſum nicotianæ twice or thrice a-day, with a purgative electuary, compoſed of gamboge, jallap and cream of tartar. This increaſed the quantity of urine, but produced no effect on the ſwelling. I ordered a drachm

a drachm of the unguentum cæruleum to be rubbed into the groin and thigh on the ſide affected, every other night, and twenty-five drops of ſpiritus ætheris vitriolici to be taken, four times a-day, omitting the former medicines. In the courſe of four or five days, there was a ſenſible abatement of the ſwelling, and her urine continued to flow freely. The ſpiritus ætheris vitriolici happened to be omitted, for ſome reaſon, and ſhe found herſelf worſe. It was then repeated, and again relieved her. She was much better, when ſhe left Mancheſter, with the regiment to which her huſband belonged.

HISTORY XLVI.

Job Bowers (Hiſtory XVIII. and XXIX.) took the infuſum nicotianæ, after omitting the tonic pills, for ſeveral days, in ſuch quantities as to produce

produce violent ſickneſs, without any diuretic effect.

HISTORY XLVII.

James Johnſon, aged twenty-three, admitted Auguſt 15, 1791, exceſſively diſtended with aſcites and anaſarca, after trying ſome other diuretics, took the infuſum nicotianæ in the quantity of eighty drops in twenty-four hours, for three days together. It produced ſickneſs, but no increaſe of urine. Fifteen grains of jallap, and two drachms of cream of tartar, given at bed-time, vomited him briſkly, and reduced the ſwellings for a time. But no increaſe in the quantity of his urine could be produced, by the moſt powerful diuretics, given in large doſes, till the end of September, when he took, after a gradual augmentation, one hundred and twenty of the tonic pills in one day. His legs had previouſly begun to diſcharge, but without diminiſhing

diminiſhing the ſize of his belly. Though he paſſed more urine, while he took largely of the tonic pills, yet the quantity was not uncommon; more water ſeemed to be diſcharged by ſtool, than by the urinary paſſages. On the ninth of October, his abdomen was conſiderably reduced, but a conſiderable degree of vertigo had ſucceeded the laſt doſe of the tonic pills; they were therefore omitted, and ſome wine preſcribed. Thirty drops of ſpiritus ætheris vitriolici were likewiſe ordered to be given four times a-day. On the tenth, pain in the bowels and a diarrhœa came on; and the vitriolic ſpirit was omitted. Opiates and aſtringents were now given, but with little ſucceſs. The purging continued violent, till the twenty-ſixth. It then went off, leaving him greatly exhauſted, but nearly free from anaſarca, and much leſſened in the ſize of the abdomen. The cereviſia diuretica was ordered

ordered on the twenty-eighth, joined with a cordial and tonic courſe, and full diet. But as his urine again decreaſed, and he began to fill a freſh, on the fifth of November, he was ordered three grains of digitalis, which, on the ſeventh, were augmented to four. Time was not allowed, however, to experience the effect of this courſe, for he was deſirous of returning to his native air, and I diſmiſſed him, much relieved, but with little proſpect of being ultimately cured.

This is the only caſe, in which I found the tonic pills affect the head; but there ſeemed a peculiar inſenſibility in this man's conſtitution to the ſtimulus of diuretics, and it was neceſſary to exhibit them in very ſtrong doſes.

HISTORY XLVIII.

Mary Rules, aged one year and a half, had the abdomen diſtended with water,

water, to an exceſſive degree. I ordered a laxative, to obviate coſtiveneſs, and a few days afterwards ſhe was tapped. A great quantity of water was drawn off, and the child appeared eaſier. Next day, however, ſhe died.

On opening the body, we found the inteſtines much inflated; the liver was enlarged; but the principal diſeaſe appeared in the kidneys. They were increaſed in ſize; the pelvis of each had undergone an active inflammation, and ſeveral of the tubuli were full of pus.

HISTORY XLIX.

Charles Allen, of the ſame age, died of aſcites about the ſame time, but the body was not inſpected.

HISTORY L.

Mary Beard, aged thirty-eight, was admitted Auguſt 15, 1791. She had laboured

laboured under aſcites and anaſarca during ſeveral months, and was now enormouſly ſwelled, ſo that ſhe breathed with extreme difficulty. She took ſome doſes of digitalis, but as they produced no increaſe of urine, I ordered her to be tapped, a few days after her admiſſion. Accordingly, the operation was performed, and eighteen quarts of water were drawn off. She was relieved in breathing, but a great degree of debility took place, and ſhe died at the end of two days. When the body was opened, the liver appeared of a firmer texture than ordinary, inclining to ſchirroſity; the kidneys were enlarged, particularly that on the left ſide; and pus was found in the pelvis of each. In the thorax, the ſurface of the lungs was much diſeaſed, and purulent; and water was effuſed in the cavity.

Of forty-ſeven caſes, which I have here preſented, under a ſhort view,

twenty-two patients have been cured, three are in a ſtate of convaleſcence, and will probably ſoon be diſcharged; five have been relieved; ſeven have received no benefit from their firſt courſe with me, and have paſſed into a different claſs of patients; and ten have died. Several of the laſt were in a hopeleſs ſtate, when I firſt ſaw them; particularly, Taylor, Rules, and Beard.* Moſt of them were alſo affected with hydrothorax. The ſucceſs of the different methods employed has therefore been tolerably good, in a diſeaſe ſo difficult of removal as dropſy. "There "is no diſeaſe," ſays Dr. Home, "which affords hoſpitals more numer- "ous patients than the different ſpe- "cies of hydrops, and none, of which "fewer are cured. The incurable "nature of hydropic affections, was "of old remarked by Aretæus: *Ab*

* Hiſt. XXIV. XLVIII. and L.

"*ipſo*

"*ipſo pauci liberantur, idque felicitate,*
"*ac deorum potius quam artis auxilio.*"*

It remains to compare the merits of the three principal remedies employed, digitalis, cream of tartar, and the tonic pills.

1. Of twenty-four patients, who took digitalis, nine were cured; two were relieved; four died, and nine were not relieved. Of theſe caſes, two were anaſarcous; ſeven were inſtances of aſcites, two of hydrothorax; the reſt were complicated, and in almoſt all the fatal inſtances, there was water in the cheſt. I have given this medicine in ſome other caſes, where it did not ſucceed; but as the patients were in a dying ſtate when I was called to them, it would be unfair to inſert them.

* Clinical Exper. and Hiſtories, p. 326.

Yet it muſt be obſerved, that in ſome of the inſtances I have given, which terminated fatally, notwithſtanding the uſe of digitalis, the patients appeared to be in that ſtate, which Dr. Withering deſcribes as moſt favourable to the action of that medicine. Hartley, Williams and Newton were examples of this.

Reſpecting the particular operation of digitalis, in thoſe caſes, it may be remarked:

a That where it proved ſucceſsful, it gave relief early, and in ſmall doſes; this appears from the firſt eight caſes, and from that of Lees.

b That when given in ſuch quantities as to excite nauſea, or to produce evident narcotic effects, it does not operate as a diuretic. Johnſon took it in ſuch doſes as to make him very ſick, and

and Williams continued it to four grains a-day, till his head and pulſe were conſiderably affected, without paſſing a drop more of water. Theſe facts correſpond with Dr. Withering's experience, ſo that it is needleſs to dwell upon them.* I have had ſuch repeated conviction of the firſt obſervation, that, if digitalis does not anſwer within the firſt week, I exchange it for ſome other diuretic, or interpoſe a cathartic, compoſed of gamboge and cream of tartar. I was led to the latter expedient, by obſerving, in Williams's caſe, and another in private practice, that the narcotic effect of the digitalis, in a long uſe of it, ſeemed to preclude its action as a diuretic. The ſame conſideration had occurred to Dr.

* Dr. Withering obſerves (p. 185.) that a diarrhæa, ſupervening on the uſe of foxglove, ſtopped its diuretic effects. It has been aſſerted, that a purging always impedes the flow of urine, in dropſies, however excited. V. Wilkes on the Dropſy, p. 213.

Stokes.* Gamboge was long celebrated for its hydragogue powers, but appears to have fallen into diſgrace by the indiſcretion with which it was exhibited. Some of the older writers talk of giving ſixteen grains for a doſe.† I have found it very ſafe and manageable in ſmall quantities; ſometimes four grains have been neceſſary to operate four or five times, in a young ſubject. In conjunction with cream of tartar, it forms a powerful diuretic, and according to circumſtances, may be made either to aſſiſt, or take the lead of the digitalis. I believe, that by this combination of the remedies, a flow of urine may very generally be commanded.

* Dr. Withering's Account of the Foxglove, p. 150.

† Wilkes on the Dropſy. Art. *Purges*. Sydenham orders fifteen grains of gamboge, in a draught, in the Proceſſus Integri, as a very gentle cathartic.

c When digitalis fails, other diuretics will often ſucceed. This appears, from the caſes of Williams, Jelly, Bowers, Johnſon, and ſeveral of the reſt.

d When digitalis does provoke an increaſe of urine, the ſwellings are not always proportionably relieved. While Waters was paſſing a great quantity of urine, and taking ſix ſpoonfuls a-day of the infuſum digitalis, the ſwellings of his legs did not diminiſh. And while Rowbottom's legs were emptied, a ſhort time before his death, the collection of water in the pericardium appeared to be increaſed.

2. Of ten caſes, in which cream of tartar alone was given, according to Dr. Home's method, ſix were cured, two died, and two are convaleſcent. Of theſe, one was a diſtinct caſe of hydrothorax in which all the ſymp-

toms were removed, and the patient continued well nearly for twelve months. In another, there was ſtrong reaſon to ſuſpect the preſence of water in the cheſt; there alſo the ſymptoms were entirely taken off. In one fatal caſe, the exiſtence of hydrothorax was aſcertained. Two others were caſes of anaſarca, one of aſcites, another of anaſarca and aſcites combined.

I have to obſerve, of the peculiar action of cream of tartar:

a That in my ſucceſsful caſes, it operated very early; generally producing an increaſed flow of urine within twenty-four hours. This was eſpecially remarkable, in Mr. C. and Mather. Dr. Home often found its ſalutary effects delayed to the end of three or four weeks.* But it is difficult to perſuade patients to continue

* Clinical Obſervations, Exper. &c. Art. Remedies of Hydrops.

the

the uſe of a medicine ſo long,* without any ſenſible benefit.

b I have commonly found it purge the patient four or five times a-day. Inſtead of increaſing the doſe, therefore, as Dr. Home directs, I have been obliged to order tonics and cordials, to enable the patient to bear the uſual quantity. There is, indeed, great difference between the conſtitutions of the uſual patients at the Edinburgh royal infirmary, and thoſe on which we have to work here. The natives of Mancheſter generally bear evacuations very ill. But after patients have continued to uſe this remedy for ſome weeks, I have found it neceſſary

* I have often found patients object to the quantity of liquid, in giving the ſolution of cream of tartar. This has obliged me in ſeveral caſes, to have recourſe to the combination with gamboge, which may be exhibited in a very ſmall portion of fluid.

to

to increaſe the doſe to ſix drachms, an ounce, or more, every day; and have then found it produce only two ſtools in twenty-four hours. In ſuch caſes, its diuretic power ſeemed to leſſen in equal proportion. After Wyatt had long taken an ounce of cream of tartar a-day, ſhe even became coſtive with that doſe, and required the uſe of gamboge. Several of my dropſical patients, however, were ſtrangers: Nield, Mather, Duny, Jelly and Johnſon were Iriſh.

c Cream of tartar commonly diminiſhes the ſwellings very ſpeedily. It produces very watery ſtools, and for the greater part, leſſens the patient's ſize more quickly than the increaſe of urine would lead us to expect.

3. Of eight caſes, in which the melampodium was exhibited, three were completely cured, one is convaleſcent; two

two were emptied, and their ſwellings quite reduced, but died, from circumſtances to be explained hereafter. One was not relieved. Another, Johnſon, had watery ſtools, and was reduced in the ſize of the abdomen, after digitalis, and many other powerful diuretics had failed. In two of theſe, there was water in the cheſt, and probably in Johnſon. Two were caſes of pure aſcites, one cured, and the other convaleſcent. The reſt were complicated.

a The tonic pills, when they have ſucceeded with me, have operated early, by producing copious watery ſtools.

b Their action is eaſy, but in caſes of long ſtanding, contrary to Mr. Bacher's aſſertion, they evidently weaken the patient, however cautiouſly given.

c Whenever they produce a diſcharge of water, they reduce the ſwellings.

ings. Theſe two effects, as I ſhall ſoon have occaſion to obſerve, are by no means reciprocal in the uſe of every diuretic.

The pulvis doveri was given only in one caſe. The occaſional cauſe of the diſorder led directly to the employment of ſudorifics, in that inſtance.

Gamboge with cream of tartar gave relief in a caſe (Bowers's) which had baffled every other preſcription. The patient was cachectic, and there was reaſon to believe that the viſcera were obſtructed. The ſame remedy, in conjunction with calomel, was given, in a caſe of anaſarca, and effected a cure very ſpeedily.

The combination of calomel with ſquills was puſhed to a conſiderable extent, with Jelly, becauſe I ſuſpected the condition of the liver. It did not, however,

however, diminiſh the ſwellings in proportion to its diuretic effect.

The tobacco tincture proved a ready diuretic with Coxe. In the two other caſes, and in ſome which I do not recollect with ſufficient accuracy to inſert, it did no ſervice. But in Coxe's caſe, which was evidently a dropſy of the ovarium, no benefit could be expected from ſimple diuretics. The mercurial friction, and ſpiritus ætheris vitriolici, produced a conſiderable effect on the diſeaſe. The latter, as well as the ſpiritus ætheris nitroſi, probably increaſes the urine by the action of its alcohol.

In Betty Clay's caſe, we have a ſtriking example of the little anti-hydropic power of an active diuretic, the ſpiritus ætheris nitroſi. She attended me only once in two or three months, and at the end of eight, was as much ſwelled

as

as ever; though ſhe had been conſtantly uſing this medicine, and though her urine was paſſing in very unuſual quantity. The tonic pills have nearly effected a cure in this caſe.

On reviewing theſe obſervations, which were made without choice, and with no predilection for any remedy, the reſult appears not highly in favour of the digitalis. Yet I eſteem it a valuable medicine, and I have always found it ſafe, by attending to Dr. Withering's cautions. The melampodium, as given in the form of tonic pills, appears, likewiſe, to poſſeſs virtues that ought not to be neglected. I have employed the cream of tartar in comparatively few caſes, but when their nature is conſidered, and the ſurprizing proportion of ſucceſs allowed for, I think we may fairly rank this medicine in the firſt

firſt claſs of hydragogues. From what I have ſeen of its effects, I ſhall hereafter give it a preference in moſt caſes of dropſy, to bring forward a larger teſtimonial of its real merits. Stronger concluſions may be drawn in its favour, from theſe caſes, becauſe they coincide with the experience of Dr. Home.* Indeed, if cream of tartar be found to poſſeſs only an equal ſhare of merit with digitalis, the former will deſerve the preference, as poſſeſſing no deleterious qualities, and being eaſily managed by practitioners of the ſmalleſt judgment. In treating of this remedy, Dr. Home has formed a juſt and valuable diſtinction, between remedies which act chiefly as diuretics, and thoſe, which at the ſame time, diminiſh the fluid effuſed in dropſies. I have been led to refer to this diſtinction more than once, in the preceding caſes. The doctor's words are theſe;

* Clinical Obſerv. Exper. &c. p. 349.

"We

"We have found, that oxymel col-
"chici, baccæ juniperi, &c. are much
"ſtronger diuretics, but much weaker
"antihydropics, than cremor tartari.
"We have ſeen, that it often neither
"increaſes urine nor ſtool, and yet
"that it cures."* If this difference were more obſerved, ſome mortifying diſappointments in practice might be avoided.

Twenty-one of my patients were males, and twenty-ſix were femals. This proportion ſupports the common opinion, that women are more ſubject to hydropic affections. Their ages have varied from a year and half to ſeventy.

In thoſe caſes which terminated fatally, where an inſpection of the body

* Clinical Exper. Obſ. &c. p. 353. The whole paſſage, which is long, deſerves particular attention.

was

was obtained, beſides the appearances of diſeaſe in the viſcera, uſual in dropſical complaints, we have frequently ſeen the kidneys affected with enlargement, inflammation, and a degree of ſuppuration. In Rowbottom, beſides the diſeaſe in the liver, there was an affection of the heart, ſufficient alone to produce death. In ſuch inſtances, diſſections prove the impoſſibility of ſaving the patient. Yet in ſeveral of theſe caſes, much relief was obtained by the uſe of medicines, and life was not only prolonged, but ſoothed. The power of an hydragogue never appears greater, to a judicious obſerver, than when it reduces ſwellings occaſioned by permanent diſeaſe in the viſcera, although the event of the caſe ſhould be ultimately fatal.

Five of my patients died, in conſequence of a diarrhæa, which began

when their ſwellings were greatly reduced. It is an obſervation of Hippocrates, repeated by all writers* on this diſeaſe, that a diarrhæa, appearing in a dropſy of long continuance, is generally fatal. Johnſon, however, had a looſeneſs, almoſt at the diſtance of three months from the time of his admiſſion, and yet eſcaped. In three of the diſſections, an evident cauſe of this ſymptom appeared: the inteſtines were in a ſtate of great inflammation.

Such a ſtate of the bowels is frequently mentioned by practical writers,† but not as connected with a diarrhæa, nor as following the abatement of the ſwellings. I am inclined to believe, that this is a peculiar termination of inveterate aſcites. We ſee

* Hoffman, tom. III. p. 329. Sydenham ſub titulo Lieutaud, Precis de la Med. Prat. &c.

† Monro on Dropſy, p. 8. and the authors quoted above.

in

in ſome other caſes, in the puerperal fever particularly, that inflammation may ariſe in the contained parts of the abdomen, in conſequence of the ſudden removal of preſſure; and in whatever way that fact may be explained, I apprehend that a ſimilar proceſs takes place, after the reduction of hydropic ſwellings.* Hoffman and ſome others, explain ſuch affections of the inteſtines from the long-continued action of the effuſed water on them, which, though a theory of no value, ſhows their conviction of the reality of the fact. It is evidently of great importance to aſcertain in what caſes ſuch a termination may be expected, becauſe the practice, in a diſeaſe of long continuance, ought to be conſiderably

* We muſt take care to diſtinguiſh, however, that in puerperal fevers the peritoneum appears to be firſt affected. In hydropic inflammation, the villous coat of the inteſtines is chiefly attacked.

influenced by it. This view will induce the phyſician to avoid all ſtimulating purgatives, and rather to ſolicit a very gradual diſcharge of the effuſed fluid, than to urge the conſtitution to a degree of action, that may increaſe to a morbid ſtate. There was no particular appearance indicative of this termination, in the caſes I have obſerved, excepting a general irritability of the habit, which always ſecured the effect of the diuretics adminiſtered.

In three other fatal inſtances, death was brought on by gangrene. This is commonly to be expected, in men, when the ſkin of the penis has become diſtended and tortuous. Johnſon is the only patient whom I have ſeen ſurvive this ſymptom. In reſpect of this ſtate, alſo, as a probable termination of dropſy, it is evident, that briſk purgatives, in the confirmed ſtage of the diſeaſe, muſt be very injurious. I ſhould even dread,

dread, in ſuch circumſtances, the effects of digitalis on the moving powers of the circulation.

I have never had recourſe to tapping, but when the ſtate of the ſwellings threatened ſuffocation. Whenever I have been compelled to employ it, I have found the effuſion renewed in great quantity, in the courſe of forty-eight hours, or within three or four days at the utmoſt.

HYDROCEPHALUS.

Great doubts muſt attend every apparent inſtance of ſucceſs, in the treatment of hydrocephalus internus. Other diſeaſes produce nearly ſimilar ſymptoms, and mercury, the prevailing remedy in hydrocephalus, is uſed with

ſucceſs in thoſe diſorders; particularly in removing worms from the inteſtinal canal. The two following caſes will prove that hydrocephalus may be ſurvived, but I am inclined to regard them as ſpontaneous cures, little, if at all aſſiſted by medicine. As new facts, however, they are worth recording, and as they afford clear inſtances of recovery, from a complaint generally deemed incurable, they may teach us not to deſpair, in ſimilar ſituations.

In February, 1783, I was conſulted for a boy, two years of age, who, about ten days before, had been ſuddenly deprived of his ſpeech, of the motion of his right arm, and of that of both legs and feet. When I ſaw him, he had recovered the uſe of his arm, in ſome degree, but the lower extremities remained entirely uſeleſs. After the firſt appearance of theſe ſymptoms, the bones of the cranium had ſeparated,

ſeparated, and the right parietal bone was conſiderably elevated. The eyes were protruded, but, in a moderate light, the pupils had a natural appearance, and contracted well. He underwent a feveriſh paroxyſm every day. His pulſe was commonly quick; his ſleep much diſturbed; and though naturally lively and active, he now appeared uncommonly dull. He had been bliſtered between the ſhoulders, without relief. I directed a bliſter to be applied over the fontanella, and ordered three grains of calomel to be given every ſecond or third day. The paralytic ſymptoms went off rapidly, under this courſe, and at the end of a week, the bones of the cranium began to approximate. The ſutures ſoon cloſed again, and the child recovered his uſual ſpirits and activity with the uſe of his limbs.

In ſpring, 1789, the family of a labourer in Wood-Street, of the name

of Belcher, was attacked by the fever then prevalent. One of the children, a boy about a year and half old, was inſenſible during a great part of the courſe of the fever, and lingered much in his recovery. When the ſtrength returned, an averſion to light was obſerved, and the head began to increaſe in ſize. At length, the ſutures opened, and the child became blind. The motion of the lower limbs was loſt about the ſame time. I gave calomel in ſmall doſes, every other day, ſo as to keep the body moderately open, but without exciting any ſigns of mercurial action. By degrees, the child became more lively, regained the uſe of its limbs, and the enjoyment of all its ſenſes, but that of ſight. The head then decreaſed in ſize, and at the end of ſix weeks, the ſutures cloſed again. The patient grew ſtrong, active and luſty. But a cataract of conſiderable ſize now appeared in each eye,

eye, and as an operation was not to be thought of in ſo young a ſubject, he was diſcharged, cured of hydrocephalus.

Perhaps the fortunate event of theſe caſes was owing to the ſuddenneſs with which the effuſion was made. In the firſt, no exciting cauſe could be diſcovered, and probably whatever cauſe had acted, had not been permanent. In the ſecond, the febrile attack ſeemed to excite the effuſion; and with the fever, the dangerous ſtate of the diſeaſe had ended. Symptoms of recovery appeared, in the firſt patient, before I ſaw him; I have therefore little heſitation in conſidering his cure as ſpontaneous. The event of the ſecond caſe is more doubtful in this reſpect. Little mercury was given, and no affection of the mouth was excited; neither was there any increaſe of urine. Perhaps the medicine aſſiſted nature in ſome

ſome degree, but I am diſpoſed to rank this alſo as an inſtance of ſpontaneous recovery, by recollecting the ſudden amendment of the conſtitution in every reſpect. The relief of the complaint in the head appeared to follow this amendment, not to introduce it.

TABLE,

13. William Williams	60	Ascites and Anasarca	1st Course. Digitalis	Not relieved
The same			2d Course. Tonic Pills	Died after the Swellings were removed
14. Elizabeth Williamson	30	Ascites & Anasar. 3d attack	Digitalis	Not relieved
15. Ellen Jones	60	Anasarca	Digitalis	Not relieved
44. Charles Allen	1½	Ascites	Digitalis	Died
45. Mary Beard	38	Ascites, Anasar. & Hydroth.	Puncture	Died
46. Edward Osmotherly	2	Hydrocephalus	Calomel	Recovered
47. Thomas Belcher	1½	Hydrocephalus	Calomel	Recovered

Cafes of Afcites alone, *thirteen*; of which, were

Cured,	5.
Died,	3.
Convalefcent,	2.
Not relieved,	3.

Cafes of Hydrothorax alone, *four*; of which,

Cured,	2.
Relieved,	1.
Convalefcent,	1.

Cafes of Anafarca alone, *five*; of which,

Cured,	4.
Not relieved,	1.

Cafes of Hydrocephalus, *two*; both recovered.

Cafe of Hydrops Ovarii, *one*; relieved.

Cafes of Anafarca and Afcites complicated; *thirteen*; of which,

Cured,	8.
Died,	1.
Relieved,	1.
Not relieved,	3.

Cafes of Afcites and Anafarca, or of either, complicated with Hydrothorax; *nine*; of which,

Cured,	1.
Died,	6.
Relieved,	2.

Total

Total cured,	22.
—— relieved,	5.
Convaleſcent,	3.
Not relieved,	7.
Dead,	10.
	47.

It appears from this table, that caſes of anaſarca alone, or of anaſarca and aſcites complicated, are the moſt curable ſpecies of dropſy; next to theſe aſcites; and that the moſt intractable kind is the complication of aſcites and anaſarca, or of either, with hydrothorax. This confirms the common opinion. My caſes of hydrothorax alone have been very favourable; but they are not in ſufficient number to juſtify a concluſion. The ſame obſervation applies to the inſtances of hydrocephalus, and to that of hydrops ovarii.

UVA URSI.

I have given this medicine in a conſiderable number of nephritic caſes, in very moderate doſes, and always with manifeſt advantage. When the pain is very acute, and the pulſe quick, I begin the cure with bleeding, and a gentle purgative, compoſed of manna and a neutral ſalt. This purgative I repeat twice a-week, and on the intermediate days, direct the patient to take five* grains of uva urſi, and half a

* The ſmallneſs of this doſe, in exhibiting a medicine generally given in the quantity of a ſcruple, may excite ſurpriſe. A medical friend, of high reputation, who inſpected theſe papers before they went to the preſs, appeared very dubious reſpecting this particular. The facts, however, are exactly as I have repreſented, and I may add, that in doſes of a ſcruple, or half a drachm, I have found this remedy produce nauſea, even when joined with opium.

grain

grain of opium, three or four times a-day, according to the urgency of the ſymptoms. I have never found larger doſes neceſſary. This method always relieves, and generally effects a cure. Of ſixteen patients, treated in this manner, I have diſcharged twelve cured.* In reckoning the cures, I do not reſt on the ceſſation of a ſingle fit, but require a permanent relief from pain. Many of my patients have uſed the remedy for ſeveral months together, before this end was attained. The fits became ſlighter, and at length ceaſed.

The mode in which this remedy acts, is ſtill unknown. It produces no ſenſible effect beſide the abatement of pain, which cannot be attributed to the ſmall quantity of opium joined

* Of the remaining four, two were much relieved, and two diſcontinued their attendance.

with

with it. Dr. Cullen's conjecture on this ſubject, though it ſeems to approach near the truth, ſtill gives us an effect for a cauſe. Perhaps the ſecret is to be ſought in the undiſcovered proceſs of the generation of calculus. If, as the new chemiſtry teaches us, the human calculus conſiſt in a great meaſure of a peculiar acid, it is poſſible, that a bitter and aſtringent of a certain nature, may exert ſpecific powers, by direct action on the ſolids, in preventing the ſeparation of that acid from the fluids, in uncommon quantity.

HYSTERIA.

Men are frequently attacked by complaints which approach to the hyſterical type. In the following inſtance, a young

young man was affected with regular hyſteric fits, in conſequence of continued vexation and anxiety.

In ſpring, 1789, I was deſired to viſit J. C. about ſeventeen years of age, on account of fits, with which he had been ſeized a few days before. I was told, that they began with great dejection of ſpirits, ſighing, and uneaſineſs about the præcordia. He then became apparently inſenſible, but groaned much, and did not recover for a conſiderable time. He relapſed frequently, from ſlight cauſes, and often had three or four fits in a day. He ſaid, that he felt the globus hyſtericus, at the approach of each paroxyſm, and that he retained his ſenſes, in ſome degree, to the termination of each. His pulſe was weak, and hurried; his tongue ſomewhat foul; and his countenance timid. His evacuations were natural. I do not recollect the particular

cular nature of his employment, but it was of a ſedentary kind.

After clearing his ſtomach by an emetic, I directed ſome pills to be made up, compoſed of opium and aſa fœtida, and to be given in ſuch a manner, that he took half a grain of the former, and four grains of the latter, every hour, previous to the approach of the morning paroxyſm. On the firſt day of taking the pills, the fit came on, but in a ſlighter degree. The next day, he was ordered to begin at a greater diſtance from the uſual time of the fit. He took, by this means, three grains of opium, and more than a ſcruple of aſa fœtida. The paroxyſm was effectually prevented by this doſe without producing the ſmalleſt uneaſineſs to the patient. Two of the pills were given at bed-time, for a few nights afterwards, and the cure was

finiſhed by adminiſtering tonics. I have not heard that he has ſuffered any relapſe.

DIABETES.

I have ſeen very few inſtances of this diſorder, and can add nothing to its hiſtory, but one caſe in which the patient was cured. Any example of ſucceſs, in a complaint generally ſo intractable, is intereſting and encouraging.

Robert Backhouſe, aged forty-five, was admitted in June, 1791. He had paſſed a very great quantity of urine, for ſeveral weeks. At the time of his admiſſion, the flow of urine was greateſt in the night, and prevented him from ſleeping. He then paſſed from

from three to four quarts in the courſe of each night excluſive of at leaſt one quart in the day. His urine was whey-coloured, and of a ſweetiſh taſte. He was much emaciated, and troubled with a conſtant thirſt; his tongue appeared parched, and was divided by ſmall fiſſures.

I directed for him a courſe of bark, with elixir of vitriol. In a fortnight, his urine came off in ſmaller quantity, and ſoon after was reduced entirely to a natural ſtate. He then complained of conſiderable heat and pain in the region of the bladder, which were removed by demulcents. He went out, with a cough, and ſome other pectoral complaints (for which he was deſired to attend as an out-patient) but perfectly cured of his diabetes.

Dr. Sydenham ſeems to have conſidered this as a diſeaſe ariſing from

debility,* but he has not taken notice of it as an idiopathic diſorder. Our patient's ſymptoms indicated tonic remedies, and theſe had all the ſucceſs I could deſire. If they had failed, I ſhould have joined the uſe of lime-water with them. This remedy has been conſidered, by ſome practitioners, as a kind of ſpecific in diabetes.

The only remarkable circumſtance which I could trace in the previous hiſtory of this patient, was that he had indulged himſelf in drinking ſpirituous liquors.

* Of the epidemic diſeaſes, from 1675 to 1680.

EPIDEMIC FEVER

OF 1789, AND 1790.

In the winter of 1789, and in ſpring 1790, an epidemic fever prevailed much in Mancheſter and Salford. The preceding ſummer and autumn had been uncommonly moiſt, and the month of November ſet in with much cold and heavy rain. The ſymptoms were, pain in the head, back, and limbs; ſickneſs; cough; and in ſeveral caſes towards the end of the winter, great pain and difficulty in voiding urine. The pulſe was quick, but ſoft; and ſometimes intermitted in the firſt days. The tongue was generally white; ſometimes with a longitudinal brown ſtripe in the middle. The patients were

commonly coſtive at firſt. In the courſe of the firſt week, the head-ach and pain of the back became excruciating, and were often accompanied with low delirium. The ſkin was, at this period, in moſt caſes dry and harſh, without any remarkable heat; but in ſome caſes, profuſe watery ſweats took place. In the ſecond week, the dryneſs and harſhneſs of the tongue increaſed; the eyes became inflamed; the patient was inattentive to what paſſed around him, but reſtleſs. The cough increaſed to a diſtreſſing degree; and coſtiveneſs became habitual. At the end of this period, the lips and teeth had generally contracted a black fur; the patient often groaned, and ſometimes ſhrieked aloud: the ſkin was parched and burning; and the diſeaſe became a formed typhus.

The epidemic was moſt prevalent from November to January, in the winter,

winter, and appeared again in the ſucceeding April. When the firſt froſts ſet in, moſt of my patients who then had the fever became delirious. Thoſe women who recovered, were commonly affected with hyſterical ſymptoms, after the fever diſappeared. The firſt inſtance of this kind was ſomewhat intricate. After the abatement of all the feveriſh ſymptoms, the patient was ſeized with violent ſickneſs and vomiting in the evening, which continued to a very late hour. An anodyne was preſcribed, and ſhe was better next day. But the ſickneſs and vomiting returned, on the ſucceeding evening, and I was then told, that ſhe had thrown up ſome green matter. On particular inquiry, I found that ſome degree of the globus hyſtericus attended the paroxyſm. The goodneſs of her pulſe every morning, after a vomiting-fit of three or four hours, confirmed me in my opinion of the

nature of the complaint. Accordingly, I ordered draughts with aſa fœtida and opium, and found that the paroxyſms yielded readily, and ſoon entirely left her.

The mortality in this epidemic was not great, though we had dreadful accounts of its ravages in ſome of the neighbouring towns. Out of the firſt ninety patients whom I attended in it, two only died. One of theſe had been confined to bed during a fortnight before I ſaw her. In general, thoſe who were viſited during the firſt three or four days of the diſeaſe, recovered very early. But when patients were ſuffered to linger for a fortnight or three weeks, before aſſiſtance was deſired, of which I had too many inſtances, the diſeaſe proved tedious and difficult.

In the early ſtage, antimonial emetics, and gentle laxatives did eminent ſervice.

ſervice. The fever often diſappeared, as ſoon as the bowels were cleared. In general, the patients bore purging well, and even required it repeatedly; the pulſe commonly became firmer and more regular, after evacuations of this kind.

J. M. had been attacked with the uſual ſymptoms of the epidemic, three days before I ſaw him. He was coſtive, and his pulſe intermitted every fifth or ſixth ſtroke. I ordered him five ounces of infuſion of ſena, which produced ſeveral looſe ſtools. Next day, the pulſe was regular, and the intermiſſion was entirely gone. This is the only clear inſtance of the Solanian pulſe that I have met with. After unloading the bowels, if the ſkin continued dry, and the pulſe quick, a diaphoretic mixture was ordered, containing antimonial wine and laudanum, in the quantity of fifteen drops

drops of the former, and ten of the latter, every three hours. The uſe of diluents was enjoined; and a particular attention to cleanlineſs (the moſt difficult part of the proceſs) carefully enforced. In all offenſive houſes, I obliged the inhabitants to white-waſh the whole; and large jars, containing new-ſlaked lime, were placed in the chamber of every patient. When the diſorder was accompanied with profuſe ſweats, the ſpiritus ætheris vitriolici, in doſes of half a drachm, repeated every three or four hours, gave great relief. The pains in the head and back, when they reſiſted theſe methods, were effectually relieved by bliſtering between the ſhoulders. This remedy exerted particular power over the epidemic. A ſingle bliſter removed every complaint, in many caſes.

The dyſuria, which prevailed in ſeveral inſtances where no bliſter had been

been applied, gave way to the large uſe of diluents combined with mucilage of gum arabic, and to the interpoſition of opium.

The uſe of bark was ſeldom abſolutely neceſſary, excepting when the diſeaſe had run into typhus. In the earlier ſtage, bark did not appear to accelerate the cure, and was only uſeful by removing debility, after the fever had diſappeared.

In ſome of thoſe unfortunate caſes, where the patient had been confined to bed during three or four weeks, before recourſe was had to the Infirmary, neither bark nor wine, though aſſiſted by other ſtimulants, produced any effect on the diſeaſe. Even when I could depend on the regular adminiſtration of the medicines, I have ſeen patients waſte away, inſenſibly to themſelves, and to thoſe about them; and after lying

lying in a kind of middle ſtate, not dead, but ſcarcely alive, expire at the end of ſome weeks. Several patients came under my care, during the intenſe heat of the laſt ſummer, who had been ill from three weeks to a month each, when I firſt viſited them. Two of them* were in this ſtate, and were evidently haſtening to their graves, notwithſtanding the free uſe of tonics and antiſeptics, when the heat of the weather, and the cloſeneſs of their apartment induced me to think of applying the ſtimulus of cold, in the manner which has been ſucceſsfully practiſed in ſome other hoſpitals.† I therefore ordered them to be waſhed with cold water, one very cloſe even-

* Anne and Frances Fowden.

† Dr. Wright of Jamaica recommends cold bathing, even in the beginning of fevers, in warm climates. His confidence in the remedy was proved by his practiſing it in his own caſe. London Med. Journal, vol. VII. p. 110.

ing.

ing. The pulſe was raiſed next morning, and they were more ſenſible. The ablution was repeated next night, and the favourable change continued. I then directed them to be completely immerſed, afterwards to be well rubbed with coarſe towels, and laid into bed, with the lower extremities wrapped in flannel. The conſequence was, an immediate appearance of recovery, which was followed by a regular progreſs to convaleſcence.

A third patient,* ſiſter to the two former, contracted the fever, and in the courſe of a fortnight ſunk into the ſame languiſhing condition. She was waſhed with cold water two or three times a week; was ſenſibly better after every ablution; and recovered completely.

A fourth patient,† about the ſame time, was ſeized with the cholera,

* Jane Fowden. † Thomas Gibſon.

then

then raging in the town. His vomiting and purging were ſoon ſtopped (I ſaw him on the firſt day) but a great ſtupor and proſtration of ſtrength remained. His pulſe was hurried, his countenance yellow, and his tongue covered with a thick cruſt, brown in in the centre. After uſing tonics and ſtimulants, and among the latter, bliſters to the temples, with little effect, I directed him to be waſhed all over with cold water. It appeared to refreſh him much; he was more ſenſible and attentive next day, and the ablution was repeated. He even became fond of it. In a few days he was able to come down ſtairs, but his friends were imprudent enough to let him indulge in animal food, which brought on a diarrhæa, and occaſioned an entire change of the courſe.

Another patient, Jane Jones, caught the fever by lodging in the ſame houſe with

with the three ſiſters already mentioned. She had been ill for five weeks before I was informed of her ſituation. The miſtreſs of the houſe had admitted this perſon freſh from the country, after I had warned her of the danger of receiving new lodgers into a houſe infected in every room. Alarmed at the effect of her imprudence, when ſhe found the girl ſicken, ſhe would not ſuffer me to be informed of her illneſs, though I was then viſiting herſelf and three of her children, who ſucceſſively caught the diſeaſe; and the ſecret was only betrayed by the ſcreams of the poor creature, which were heard in the adjoining houſe. An inquiry took place, and I was made acquainted with the truth. I found her delirious, with a black fur on the lips and teeth; her cheeks extremely flushed, and her pulſe low, creeping, and ſcarcely to be counted. Finding that the bark with ſtimulants, wine,

and

and the application of bliſters produced no alteration, but that on the contrary ſhe became more inſenſible, and paſſed whole nights in ſhrieking, I ordered her to be completely waſhed with cold water. The firſt and ſecond trials produced no remarkable effect, but finding her no worſe, I directed her to be entirely immerſed. Next day, ſhe was able to ſit up. The remedy was repeated at proper intervals, and ſhe recovered perfectly. All theſe caſes occurred, during the exceſſive hot weather of July and Auguſt, 1791. How far they will apply, in cooler ſeaſons of the year, muſt be determined by future obſervations.

The recovery from the ſtate of typhus was, as uſual, very gradual. In a few inſtances abſceſſes formed, and ended the complaint. Margaret Thompſon, aged twenty-ſix, was admitted November 9, 1789, with the ſymptoms

toms of the prevailing epidemic, which ſhe attributed to contagion. In the courſe of a fortnight, ſhe was tolerably free from fever, and ſeemed to recover very quickly. But on the firſt day of a ſmart froſt, ſhe was induced to go out, and to walk as long as ſhe could ſupport herſelf. The fever returned next day, with great violence; a ſevere diarrhæa came on; and the cough became inceſſant, and violent. A conſtant delirium attended theſe ſymptoms, ſo that the caſe appeared entirely hopeleſs. Near three weeks were ſpent in combating theſe alarming appearances: her diarrhæa was then leſſened, and ſhe became rather more ſenſible. She now complained greatly of a pain in her right ſide, which kept her in conſtant agony, and obliged her to lie almoſt always on her face. Upon examination, I found a round hard tumour under the falſe ribs on the right ſide, deep ſeated, and not affecting the

colour of the integuments. She felt often a violent throbbing in it, and was ſeized with ſhiverings ſeveral times in the courſe of the day. She now paſſed under the care of another practitioner, and I only know, in general, that the tumour burſt externally, and that ſhe recovered. If, as there was reaſon to ſuſpect, this was an abſceſs of the liver, the caſe may be added to the number of fortunate eſcapes.

In ſome inſtances, where conſtant ſtupor and low delirium prevailed with redneſs of the tunica albuginea and a dark-red fulneſs overſpread the face, I found bleeding with leeches in the temples, ſucceeded by moderate doſes of bark, combined with muſk very uſeful. Towards autumn, 1790 ſeveral caſes of petechial fever occurred to me, and, in one quarter of the town the typhus was complicated with an inflammatory affection of the perito-

neum

neum. With the common appearances of typhus, there was pain and diſtention of the abdomen; the patient was ſometimes obſtinately coſtive, and again violently purged. Two caſes of this kind proved fatal; one or two others recovered, by the timely application of bliſters to the abdomen. Children only were thus affected.

The firſt inſtance that occurred to me, was that of John Scholfield, aged ſeven. He had pains in his head and back, but complained particularly of his belly, which was diſtended. He was alternately coſtive and looſe; his pulſe was weak; his tongue covered with a thick brown cruſt. His countenance was ghaſtly, and clay-coloured. He appeared to be ſometimes eaſier; but a ſtupor came on, and he died on the eighth day of the diſeaſe.

On diſſection, the whole inteſtina canal appeared greatly inflated; i many places it was externally inflamed but no marks of diſeaſe were diſcover able within the cavity of the tube A thick inflammatory exſudation wa ſpread over the whole ſurface of th peritoneum, which, in ſeveral places gave an appearance of adheſions be tween the turns of the inteſtines.

In the other fatal inſtance of thi diſeaſe, the patient was covered wit petechiæ, from the firſt attack. Per haps local inflammation is more com monly joined with typhus than we a aware. Sir John Pringle's diſſection prove, that ſuppuration in the brain no unuſual effect of ſuch fevers; an in different ſeaſons, the determinatio ſeems to be made to the bowels o lungs, according to the ſtate of th prevailing epidemic.

In the courſe of the laſt twelve months, I have met with ſeveral inſtances of putrid fever, in young girls, accompanied with broad maculæ, on the body and limbs, and a gangrenous ſtate of the labia pudendi. The parts were greatly tumefied, and extremely painful. It was a very fatal complaint.

J. C. was brought to me as a paralytic patient. The motion of the right ſide was nearly deſtroyed; his ſpeech was greatly impeded, and his eyes were wild and diſtorted. On inſpecting his tongue, I perceived a thick feveriſh cruſt, with a brown liſt along the centre, and his pulſe was hurried. He had been ill for ſome time, and I was told by his attendant, that he was at firſt attacked with ſtrong feveriſh ſymptoms. Even after the paralytic appearances, he continued to complain of rigours, and of pain in the ſmall of his back. All theſe circumſtances

gave ſuſpicion that typhus was the original diſeaſe, though the paralyſis was now the moſt alarming appearance. He died the next day.

On examining the brain, a livid depreſſion was remarked on the upper part of the lateral lobe of the left hemiſphere. Under this, an abſceſs was found, containing a large quantity of pus, and extending into the left ventricle. The weight of the fluid made that part of the hemiſphere protrude ſo much, that only the right ſide of the corpus calloſum was viſible when the hemiſpheres were ſeparated in the uſual way, to obtain a view of that ſubſtance. Another abſceſs was diſcovered in the ſame hemiſphere which did not communicate with the former. Suppuration had taken place in the right hemiſphere, and the ventricle of the ſame ſide was full of pus. The ſpinal marrow was flattened, ap-

peared

peared not more than half its natural ſize, and was ſurrounded with water.

Fevers of this ſpecies always exiſt among the poor, in certain quarters of this town; and their ravages are only checked by the privilege which patients in indigent circumſtances enjoy, of being viſited at their own houſes by the phyſicians of the infirmary. As the ſick are equally apprehenſive of the attack, and inſtructed in the means of procuring aſſiſtance, they commonly apply early to the infirmary, and are often ſeen in the firſt days of their illneſs. An opportunity is thus afforded of cutting the diſeaſe ſhort, and of uſing precautions for ſecuring the reſt of the family from the effects of contagion. But the abuſes which perpetuate the germ of the diſorder cannot be remedied by the activity of any individual, or the ſuccours of any charitable inſtitution now exiſting. It

will not be uſeleſs, however, to point them out; if they cannot be entirely done away, they may be leſſened; and though a ſpirit of benevolence already prevails among the inhabitants of Manchester, it may add ſtrength to its exertions to ſhew, that the health of the rich is often nearly connected with the welfare of the needy.

1. The mean lodging-houſes, in the out-ſkirts of the town, are the principal nurſeries of febrile contagion. Some of theſe are old houſes, compoſed of very ſmall rooms, into each of which three, four or more people are crouded to eat and ſleep, and frequently to work. They commonly bear marks of a long accumulation of filth, and ſome of them have been ſcarcely free from infection for many years paſt. As ſoon as one poor creature dies, or is driven out of his cell, he is replaced by another, generally from the country, who

who ſoon feels in his turn the conſequences of breathing infected air. During all this time, the maſter of the houſe is totally regardleſs of the miſery before his eyes, while he and his family remain untouched; and it requires ſome exertion to produce any attention to cleanneſs or ventilation. The latter object, indeed, can be very imperfectly obtained in many of theſe houſes, when they are ſituated in dark narrow courts, or blind alleys. In moſt of theſe places lodgers are received. The conſequence is, a perpetual ſucceſſion of fever-patients in them. In other parts of the town, the lodging-houſes are new, and not yet thoroughly dirty, but in theſe the upper ſtory is laid into one room, directly under the tiles, pierced through both by the ſun and wind. In this room eight or ten people often lodge, and as the beds almoſt touch one another, the contagion of fever, once introduced

troduced, can hardly be prevented from ſpreading. But it is chiefly in old houſes, confined in narrow paſſages, that contagion is produced. Of the new buildings, I have found thoſe moſt apt to nurſe it, which are added in a ſlight manner to the back part of a row, and expoſed to the effluvia of the privies.

2. The cuſtom of inhabiting cellars, alſo tends to promote both the origin and preſervation of febrile infection. But even in them, the action of filth and confined air is always apparent when fevers ariſe. I have often obſerved, that the cellar of a fever-patient was to be known by a ſhattered pane, patched with paper, or ſtuffed with rags, and by every external ſign of complete dirtineſs.

3. After all that has been done for the ventilation of cotton-mills, I fear that

that fevers are ſtill produced in ſome of them. I attended ſeveral patients, laſt ſummer, in the worſt ſtate of typhus, who had all worked in one cotton-mill, and all of whom became ill about the ſame time.

4. Other permanent cauſes of the production of contagion, are, want of proper food and clothing, ſleeping on the floor of a damp cellar, with few, or no bed-clothes, and the conſtant action of depreſſing paſſions on the mind. Theſe cauſes alſo increaſe the danger of the diſeaſe in a very great degree. I have ſeen patients in agonies of deſpair on finding themſelves overwhelmed with filth, and abandoned, by every one who could do them any ſervice; and after ſuch emotions I have ſeldom found them recover.

Illud in his rebus miſerandum et magnopere unum
Ærumnabile erat, quod, ubi ſe quiſque videbat
Implicitum morbo, morti damnatus ut eſſet,
Deficiens animo mæſto cum corde jacebat
Funera reſpectans, animam & mittebat ibidem.
Lucret. lib. VI.

5. The

5. The ſame inattention in buying infected clothes prevails among the poor in Manchester, that is noticed by authors, as extending the plague in the Turkiſh dominions. When a fever ſeizes one or more of the members of a labouring family, as thoſe who act as nurſes are debarred by that duty from working, every part of their furniture that can be diſpoſed of, is gradually ſold for ſubſiſtence. At length, all but the ſick are almoſt ſtripped even of their bed-clothes, to ſupport life, and the action of hunger, dampneſs and deſpondence prepares freſh victims to the diſeaſe among the reſt of the family. The clothes thus diſpoſed of, thoroughly penetrated by contagious effluvia, are purchaſed by healthy perſons, without ſuſpicion; and thus fevers may often ariſe among the ſervants of the rich, as well as by their incautious viſits to the ſick. It may be a practice occaſionally, with the broker, to heat

heat ſuch articles in an oven, but that is done with no deſign of deſtroying contagion.

If lodging-houſes were licenſed, and brought under the notice of the civil magiſtrate, many of the cauſes of fever might be prevented. They might be viſited, by proper officers, frequently, and regular reports of the names, occupations, conduct, &c. of the lodgers, as well as of the ſtate of the houſes with regard to infection, might be laid before the magiſtrates of the diſtrict. It would not be difficult to diſcover, at what point the want of cleanlineſs becomes dangerous, and as far as ſcouring and white-waſhing can remedy that defect, the hazard might be prevented. But a conſiderable degree of trouble and expence would attend the efforts of the inſpectors to preſerve the beds and bed-clothes in tolerable order. Wretches are ſo frequently received into

into ſuch places, in a ſtate of extreme filthineſs, that the moſt active benevolence muſt deſpair of ſupporting comfort in them by any exertions. For, as it is very difficult to convince the poor, that cloſe and dirty rooms are noxious, there would be no great probability of their adopting willingly regulations enforced by authority. Where ſtubbornneſs and contempt would not avail, evaſions would be greedily ſought, and the vigilance of the inſpectors baffled by every art of miſtaken cunning.

To put them under ſome regulations, however, is certainly deſirable for many other reaſons. But a principal advantage, in a medical view, where the means of prevention ſhould prove inadequate, would be the power of clearing an infected houſe of its inhabitants, on the repreſentation of the inſpectors, and of keeping it empty, till all

all neceſſary methods of cleaning and ſweetening it ſhould be employed. This plan would require the aid of fever-wards, to be eſtabliſhed in different quarters of the town, to receive patients from infected houſes, or from cloſe cellars, or pent-up rooms, where the want of air and of proper attendance leaves little chance of eſcape to the ſufferer. The pariſh-officers, at preſent, find clothes and blankets for the ſick-poor, but beds ſhould alſo be provided, on occaſion. A plan ſimilar to this has been actually practiſed at Bury,* in this neighbourhood, with ſucceſs, and if the trouble would be greater in Mancheſter, the danger is proportionably great. Where ſo much care is already taken, to provide relief and medical aſſiſtance for the ſick-poor, the ſuperior duty of preventing their

* See Sir William Clarke's Addreſs to the Inhabitants of Mancheſter, &c. on this ſubject, printed in 1790.

diſtreſſes

diſtreſſes may yet be hoped to come into action.*

DILATATION OF THE HEART.

Præternatural enlargements of the heart and great blood veſſels appear to be more common than authors would lead

* I have met with an inſtance of phthiriaſis, as the conſequence of a fever, which aroſe in a dirty lodging-houſe in Salford. It was ſituated in a narrow covered paſſage, ending in a back-court; the walls appeared to have been overſpread with filth for many years, and the rooms were crouded with beds, into which the moſt loathſome objects were admitted nightly for a few halfpence. Contagion had been introduced by ſome of thoſe unhappy creatures, and the miſtreſs of the houſe and her ſon were attacked by a typhus. She ſoon recovered, but he lingered in a weak ſtate for a conſiderable time, and after being enabled to creep abroad again, was affected with phthiriaſis. He applied to me, a year afterwards, to be received as an in-patient. The complaint was ſtill going on, and he was leſs emaciated and enfeebled, than might have been expected.

lead us to ſuppoſe. In the courſe of the laſt two years, I have ſeen a conſiderable number; but at preſent I ſhall chiefly mention thoſe which have terminated

expected. Such are the effects of the preſent method of lodging the poor. They are driven to hire diſeaſe, and when fevers prevail in the families inhabiting theſe cells, to undergo the horror of lying in the ſame room, and often in the next bed, to the dying or the dead. The charity of the eaſtern nations provided ſpacious accommodations for the traveller and the vagrant, in their Caravanſerais. But the eaſtern ſupineneſs has ſuffered the nobleſt of thoſe ſtructures to contract the inconveniences incident to promiſcuous reſort. Among the capricious diſpoſitions ſo frequently made of ſuperfluous wealth, it is rather ſurpriſing, that no benevolent Quixote has ever thought of furniſhing accommodations of a ſimilar nature for the poor of this country; eſpecially as fancy has evidently been far ſtretched to diſcover or even to invent objects of poſthumous charity. Perhaps it may relieve the waverings of ſome mind, to ſuggeſt a whimſical ſcheme, newer, and ſomewhat more reſpectable than a hoſpital for cats, a retreat for perſons who are born to a particular ſurname, or a ſingle night's ſhelter for ten poor men, "not rogues or proctors."* In a building on ſuch a foundation, conſtructed with a

* For an account of the laſt Inſtitution, ſee the Antiquarian Repertory.

terminated fatally. I have generally found them accompanied with dropſical ſwellings and much flatulence frequently with a cough and ſpitting almoſt always with œdema of the face There is ſometimes violent pain acroſs the breaſt, attended with frequent de-

view to proper ventilation, but excavated by flues, ar capable of being occaſionally heated by the ſteam of war water, a ſtraw-mat and a blanket would be luxury to poor man, who would gladly pay an equal ſum for a miſſion, to that required by a keeper of fever-beds. bath, in a proper ſituation, might be ready for the prep ration of impure lodgers, and coarſe, clean dreſſes flannel might be furniſhed for the night by the ſun either gratuitouſly, or for a trifling ſum. Such a plac properly ſuperintended, might prove an aſylum to tho who wiſh to avoid guilt, and would aſſure the good co duct of every perſon admitted, during the night. Ma of the wretches who now diſgrace the public ſtreets midnight, would be happy in finding ſuch ſhelter. Th are diſtreſſes from which, in extenſive towns, neith talents nor virtue will always ſecure the unfortuna and their relief ſhould not be truſted to the precario aid of private benevolence. *Savage* is known to ha ſlept in the aſhes of a glaſs-houſe, and *Johnſon* to ha rambled all night through the ſtreets of London, fr incapacity to procure a comfortable lodging.

liquium

liquium; ſometimes the pain is felt acroſs the lower part of the abdomen, eſpecially when a degree of inflammation has taken place in the heart. The progreſs of the diſorder is very unequal. Sometimes the palpitation is ſo violent, that the patient ſeems ready to expire, yet in the courſe of a few hours, it will abate, and the patient will be able to walk out of doors, inſomuch that the diſeaſe frequently ſeems to be in a retrograde ſtate. A patient under my care, with a conſiderable dilatation of the heart, after having undergone violent pains acroſs the thorax, ſucceeded by fainting, is now, at the end of a year and half from the beginning, conſiderably eaſier, and has been for ſome time free from pain and deliquium. Laſtly, death often happens ſuddenly, in ſuch caſes, without any rupture of the heart.

When the apex of the heart ſtrikes very low, it always gives the impreſſion

of a much greater dilatation than actu
ally exiſts. The ſtroke will be fel
for example, between the eighth an
ninth, or the ninth and tenth rib
when the ventricles are very little en
larged beyond their uſual ſize. Th
moſt certain ſign of dilatation, is th
jarring ſenſation given to the hand, b
each ſyſtole. The ſtroke ſeems r
ſtrained, and is ſucceeded by a kind
thrilling, which cannot be clearly d
ſcribed, but is entirely different fro
the ſhake of a palpitation. It is nece
ſary to be very cautious in decidi
whether an enlargement exiſts, for
have known the common palpitati
in chloroſis pronounced a dilatation
the heart, and the patient nearly d
ſtroyed by the conſequent mode
treatment. The pulſe is very irregula
ſometimes feeble, ſmall and interm
ting; ſometimes extremely quick a
hard; or jarring, like the ſyſtole of t
heart itſelf. When the palpitation
violent, the head is affected with ſtro
diſtreſſi

diſtreſſing pulſations, which patients often compare to the ſtrokes of a large hammer. I have ſometimes found this palpitation in the head more uneaſy, and more complained of, than that of the heart, even when the latter was evidently dilated. Fainting fits often attend this ſtage of the diſorder.

Theſe are the principal facts reſpecting this diſeaſe, which I have collected from my obſervations and diſſections. I ſhall now illuſtrate them by caſes.

William Cavanagh, aged nine, admitted in March, 1790, had complained for a month before, of violent palpitation of the heart, which had then become conſtant; of a troubleſome cough, and frequent pain in the abdomen. His legs were anaſarcous, and his face was bloated. His diſorder began with a ſlight fever, which ceaſed about the fourth day. He had ſuffered

a feveriſh attack, once a-year, for two or three years paſt, but never experienced the palpitation till the laſt acceſſion. The ſtroke of the heart, when I ſaw him, could be diſtinctly felt between the ninth and tenth ribs. Every pulſation ſhook him ſtrongly, and he was ſo much diſtreſſed, as to be unable to lie down, or to reſt above a few minutes, in any other poſture than leaning on a table breaſt-high upon his forehead and elbows. His pulſe was variable; ſometimes quick and rather full; ſometimes low and hardly perceptible. He never complained of any pain in the cheſt. Under theſe complaints he ſtruggled upwards of three weeks, growing worſe from day to day, and at laſt expired without any agony, after having ſpit blood for a few hours. The pain in the abdomen had been very troubleſome, for ſome days before his death.

O

On opening the body, the abdominal viſcera appeared perfectly ſound. In the thorax, the heart was not much enlarged, but extremely thickened; the pericardium adhered to it cloſely in its whole circumference, and indeed was almoſt become one ſubſtance with it. Adheſions, of uncommon thickneſs and ſtrength, were alſo formed to the lungs and pleura, in every direction. One chord, about the thickneſs of a man's little finger, tied down the apex of the heart to the pleura, on the left proceſs of the diaphragm. The lungs were ſound.

This caſe might afford many reflections. The ſigns of extraordinary dilatation of the heart exiſted here, with little real increaſe in the ſize of that organ, while (excepting the cough*)

* Senac has explained the concomitancy of this ſymptom with diſeaſes of the heart and pericardium, very judiciouſly. Traité de Cœur, tom II. p. 357.

no ſymptoms of carditis appeared, unleſs the pain in the abdomen ought to be reckoned ſuch. The only circumſtance that could give ſuſpicion of the latter, was the quick progreſs of the apparent dilatation, yet in ſuch an affection, there was no ſtrong reaſon to ſuſpect inflammation, at the diſtance of a month from its commencement. May we not, therefore, keep the probability of chronic inflammation in view, when the ſigns of dilatation are preceded by fever, or attended with febrile ſymptoms; when their progreſs is unuſually rapid, without any obvious cauſe; when the pulſe is often quick; when there is a troubleſome cough; and when there is much pain in the lower part of the abdomen, without any affection of the excretions? The following caſe will add force to the obſervation of the laſt ſymptom.

E. D. aged ſeventeen, had pains in her feet, which ſometimes produced ſlight ſwelling

ſwelling and redneſs of the parts. The pains were very irregular; ſometimes in one, ſometimes in both feet. When they ceaſed entirely, ſhe felt great ſickneſs, dejection of ſpirits, and a tendency to faint. She waſted daily; the pains often ſhifted to her knees, and when violent there, the ſkin was tinged with a dark-green colour. At length ſhe became comatoſe, but complained frequently of pain in the lower part of the abdomen. She died at the end of four months from the firſt attack. On diſſection, the contents of the abdomen appeared entirely ſound; but the pericardium adhered cloſely to the heart, in the whole of its compaſs, and the latter appeared thickened from inflammation. The next caſe may perhaps aſſiſt us in diſtinguiſhing, during life, the part of the heart affected with dilatation.*

John

* Mr. Senac has adverted to this circumſtance, but with full conviction of its obſcurity: "Il eſt certain que "les

John Rowbottom, already mentioned among the dropſical patients (hiſtory X.) ſome time after the ſecond removal of his ſwellings, was attacked by a ſevere diarrhæa, which was removed by opiates and aſtringents. He now complained that the palpitation was more troubleſome, and that he felt it lower. No great difference, however, could be diſcovered by the hand; but the pulſation gave the impreſſion

" les dilatations des diverſes cavités (du cœur) peuvent " etre diſtingueès. En general les battemens du cœur ne " ſont pas violents quand le ventricule droit, ou le ſac de " ce ventricule, ſont extremement dilatés; a peine les " dilatations produiſent elles des palpitations; dans beau- " coup de cas, les malades, ſentent ſeulement un grand " poids dans la region du cœur." —— " Les dilatations " du ventricule droit & de ſon oreillette produiſent tou- " jours des battemens dans les veines du col —— " " L'abſence de ces battemens, lorſqu'une dilatation du " cœur eſt conſtateé, établit cette dilatation dans le ven- " tricule gauche; mais ce ventricule dilaté ſe manifeſte " ſouvent par un autre ſigne; ſi les artéres ſont libres, " leurs battemens ſont extremement violents." Traite de Cœur, tom. II. p. 327-8.

of

of its being felt through a bladder almoſt full of water.* After the diarrhæa ſtopped, his ſwellings roſe again, and were again removed from his legs by the uſe of digitalis. The abdomen did not decreaſe much under this laſt courſe, and after lingering in a complaining ſtate, but not apparently worſe, he died ſuddenly on Saturday morning November fifth. When the body was opened,† a great quantity of fat was obſerved, between the integuments and the muſcles of the abdomen. There was much water within the perito-

* Mr. Senac obſerves, that the fluctuation of water contained in the pericardium, may be diſtinctly felt, during violent palpitations, between the third, fourth, and fifth ribs. Traité de Cœur, p. 361.

† This diſſection furniſhes an exception to Mr. Senac's firſt rule for diſtinguiſhing dilatations of the ſinus venoſus. Indeed he does not ſeem to have attended ſufficiently to the circumſtances of the pericardium, one of which, adheſion or effuſion, almoſt always accompanies dilatations, and affects the ſtroke of the heart in a particular manner.

neum,

neum, and ſeveral large hydatids appeared in the lower part of the cavity. The liver was extremely enlarged, and ſcirrhous: at the firſt view of the viſcera, it covered the ſtomach completely. Several irregular, white plates, of a cartilaginous nature, ſhewed themſelves on the ſurface of the ſpleen, which was otherwiſe ſound. The pancreas was ſomewhat indurated. The meſenteric glands were very much enlarged and hardened. On examining the external appearance of the inteſtines, marks of inflammation were very diſcernible; when part of the canal was opened, the villous coat was found inflamed to a conſiderable degree. This affection ſeemed to run through the whole. The kidneys were in a natural ſtate.

In the thorax, a great quantity of water was found, with ſome hydatids. The pericardium was quite full of water.

ter. The right auricle, and ſinus venoſus were enlarged to ſuch a ſize, as almoſt to equal the ordinary bulk of the left ventricle. The left auricle, and both ventricles were nearly in the uſual ſtate. The lungs were ſound, but ſmall.

When the pulſation, in ſuch caſes, feels remote,* and extending acroſs the breaſt, as well as downwards, and when the apex of the heart does not ſtrike the ribs very forcibly, may we not conjecture, from this narration, one or both auricles to be affected, and prognoſticate a leſs ſpeedy termination of the diſeaſe? This caſe alſo proves the utility of employing diuretics, even where permanent læſions of the viſcera exiſt. Rowbottom was emptied by medicine three times; his life was thus prolonged, and its duration rendered more

* Diemerbroeck has adverted to this circumſtance.

tolerable.

tolerable. The power of digitalis over hydrothorax was not ſenſible, however, during the laſt courſe of that medicine.

No doubt, the quantity of water effuſed within the thorax, and the cavity of the pericardium itſelf, muſt have had a ſhare in the peculiar impreſſion given by the ſyſtole in this caſe; but from the long intervals of relief afforded, I cannot ſuppoſe the effuſion to have been in equal quantity, at every period of my attendance. An attention to this circumſtance is of great importance in practice, becauſe much relief may be adminiſtered by a proper exhibition of diuretics, when there is reaſon to ſuſpect the preſence of water in the pericardium. It is on this ſuppoſition that I account for the relief experienced by Rowbottom, and the following caſe will place it in a ſtronger point of view.

James

James Hamilton, aged eleven, came under my care about the beginning of December, 1791. He was affected with a conſtant palpitation of the heart, which had begun in the preceding May, and now prevented him from lying down, or from reſting in any other poſition than that of leaning on his elbows. The ſtroke of the heart was perceivable almoſt under the falſe ribs, and extended acroſs the thorax, but was moſt forcible a little below the natural place, between the fifth and ſixth ribs, rather obliquely, however, than directly. The ſtroke was ſoft, but vibrating, diſtant, and ſomewhat undulating. His legs were ſwelled ſlightly, and his urine was rather leſs than natural. He had a very troubleſome cough, accompanied with little expectoration, and heaved ſtrongly in reſpiration. His face was pale and emaciated. The pulſes in his different wriſts were not ſynchronous, either with the heart or with each other.

other. From theſe circumſtances, there was reaſon to ſuſpect water in the thorax, and particularly in the pericardium. I put him on a courſe of ſpiritus ætheris vitriolici, with ſmall doſes of laudanum. In a ſhort time he began to diſcharge more urine, and the palpitation was ſenſibly relieved. He was then able to lie down, and to ſleep on either ſide without diſturbance. The ſwellings of his legs likewiſe diſappeared. At the end of a few weeks, he was tolerably free from uneaſineſs, and his cough began to leave him. The ſtroke of the heart was now more circumſcribed, and felt firmer, though ſtill of the aneuriſmal kind, and he was ſenſible that it was higher in his cheſt. About this time, a complaint in his ſtomach occaſioned the omiſſion of the diuretic, for a few days. During this interval the palpitation again increaſed, and his legs ſwelled. After clearing his bowels, however, the ſymptoms were

were again relieved, by reſuming the diuretic courſe. In the courſe of my inquiries, I found that before he came under my care, he had been attended by another phyſician, who, among other pectoral medicines, had ordered him ſquills. An increaſe of urine was the conſequence, and temporary relief was obtained. He is at preſent tolerably eaſy and cheerful, and the diſorder does not ſeem to make much progreſs. Digitalis may prove very uſeful in ſimilar caſes, by leſſening the impetus of circulation, as well as by promoting the flow of urine, and thus contributing doubly to relieve the patient's diſtreſs. We can expect little more than to ſooth, and perhaps to prolong exiſtence in ſuch caſes.*

Palpitations

* Baglivi ſays, with his cuſtomary good ſenſe, "in morbis pectoris, ſemper ducendum eſſe ad vias urinæ:" De Aſthmate. — Probably, the great efficacy of ſquills, in diſorders of the breaſt, has been often owing to the

Palpitations are often ſo ſevere, as t
excite ſuſpicions of enlargement of th
heart without reaſon. It appears, bot
from Cavanagh and Rowbottom's caſ
that the apex of the heart may ſtrik
very low, although the ventricles b
not dilated. And I have found th
moſt terrible palpitations yield to ant
ſpaſmodics or tonics, uſed according t
the patient's general habit, and to th
attending ſymptoms.

E. H. aged eleven, belonged to a
unfortunate family, which was reduce
to paſs the winter of 1789 in a col
damp cellar, without beds, and ve
thinly clothed. They ſlept on tattere
pieces of carpet, covered with a litt
ſtraw. A fever ſoon roſe among then
but it was this girl's lot to be ſeiz
with a violent palpitation of the hea

unnoticed action of the remedy as a diuretic. It is
markable that Baglivi orders the julepum tabaci
aſthmatic caſes.

Eve

Every ſtroke of the pulſation raiſed up her clothes, ſo as to be viſible at ſome diſtance, but the apex of the heart was felt nearly in the uſual place. She took tincture of caſtor, in doſes of thirty drops, three or four times a-day; and this, with attention to her clothing and diet, ſubdued the palpitation, in the courſe of a few weeks.

But if we are liable to deception from the violence of ſuch ſigns, there are other caſes, in which the ſymptoms of dilatation are very trifling, and extremely obſcure. Some ſymptoms appear, but they are miſunderſtood or neglected; the patient appears better, or at leaſt no worſe; and hopes of recovery are given. In the height of this ſecurity, the fatal ſtroke arrives: every one is aſtoniſhed; and an event which ought to have been foreſeen and foretold, paſſes for ſudden death. In the following caſe, the ſymptoms of

two fatal diſeaſes, both exhibiting themſelves under ſlight appearances were combined. It will ſerve as an example of the treacherous calmneſs with which diſorders both of the heart and liver ſometimes proceed.

Margaret Ellis, aged twenty-three was firſt admitted an out-patient, on account of amenorrhæa, which was then her principal complaint. She had ſometimes ſwellings of her ancles towards evening. After ſome time ſhe complained of a cough, and uneaſy palpitation of the heart. She was then made an in-patient, about the middle of April, 1791. In addition to her former complaints, ſhe had now pain in the region of the liver, difficulty of breathing, and a quick pulſe. Her face was bloated, and had a purple caſt. She took ſoluble tartar in laxative doſes, but grew worſe, and died ſuddenly one evening, juſt after appearing more cheerf

cheerful and eaſier than uſual. On opening the body, the liver bore marks of chronic inflammation on the whole of its ſurface; the other abdominal viſcera were ſound. The thorax was full of water; the lungs were conſiderably diſeaſed. The heart was much enlarged, and quite full of blood, in all its cavities.*

The duration of complaints of this kind is very various. Even when dilatations of the heart can be aſcertained by the progreſſive deſcent of the apex, long intervals are ſometimes indulged, during which the patient can uſe moderate exerciſe with tolerable eaſe. In other caſes, the diſorder begins, and terminates fatally, in the courſe of two or three months. The length of the complaint has varied, within my own

* See obſervations by Senac on this ſubject, tom. II. p. 415.

obſervation, from a quarter of a year to nine years. There is likewiſe much difference in the ſufferings of the patients. Sometimes, as was Cavanagh's caſe, it is dreadful to witneſs them; in other inſtances, like that of Ellis, the palpitation is only occaſionally troubleſome, and is eaſily borne in general. All the perſons who have come under my care in this diſtemper, have been young. Of eight caſes, which I have ſeen within the laſt two years, none of the patients were above thirty years of age. Some were under ten. A man about twenty-five years old, who conſulted me ſeven years ago, had a dilatation of the heart, brought on by hard drinking, which killed him in the courſe of twelve months. In other caſes, I have found the diſeaſe occaſioned by raiſing great weights, or by too long a continuance of much bodily exertion. Frequently no particular cauſe can be aſſigned for its commence-

commencement. It ſometimes appears after ſlight feveriſh attacks. I have met with two inſtances of this kind. But in ſuch caſes, either a ſlight degree of inflammation muſt be ſuppoſed to have affected the heart, or an original weakneſs of the organ muſt have given a prediſpoſition to the complaint. It is well known, that enlargements of the heart are frequently obſerved, in patients who die of typhus. In irritable habits, and young ſubjects, therefore, an irregularity in the circulation, however produced, whether by fever, or, as in Ellis, by the ſuppreſſion of a conſtitutional diſcharge, may create the firſt tendency to this complaint. In chloroſis, ſuch a tendency is always remarkable; and the ſucceſsful treatment of that diſorder, by the moſt invigorating tonics, may ſuggeſt a doubt, reſpecting the propriety of treating all incipient dilatations of the heart by evacuation. In other partial con-

geſtions, and in palſies, tonics, an
even direct ſtimulants are given wit
advantage, to recover the tone o
the dilated or ruptured veſſels. An
the tendency to deliquium, the weak
flatulent ſtate of the ſtomach and bow
els, the dropſical ſymptoms, owing t
a delay in the return of the blood, an
the languid feelings of the patient, i
the *firſt ſtage* of the complaint, ſeem
to point out a careful exhibition o
tonics, as a probable method of pre
vention.* Even at a very advance
period, one of my patients indulge
himſelf in the uſe of wine, contrar
to my directions, and thought himſel
relieved by it; and Rowbottom, to
wards the cloſe of his diſorder, too
four ounces of wine daily, with eviden
benefit. Great attention muſt un
doubtedly be paid, in determining o

* I obſerve that Mr. Senac recommends the uſe of cha
lybeate waters, in beginning dilatations. Traité d
Cœur. tom. II. p. 330.

ſuc

ſuch a plan, to the ſex, the age, the peculiar habit and circumſtances of the patient. For no caſe can be ſuppoſed, in which the method adopted tends more immediately to ſuppreſs, or encourage the diſeaſe. When the dilatation has proceeded to a conſiderable degree, indeed, direct ſtimulants are generally improper, but when great languor and debility attend, they are ſometimes admiſſible as palliatives. Indeed I apprehend, that no excluſive rule of practice can be formed in this diſorder, which will not be found often uſeleſs, and ſometimes prejudicial.

I ſhall only add, as a farther caution, that I have found a pain extending acroſs the breaſt very troubleſome, in conjunction with flatulence and violent palpitations, and I have ſeen medical men diſpoſed to treat it as a ſymptom of inflammation or dilatation. But a cloſe attention has convinced me, that

it

it was owing to a ſpaſmodic affection of the œſophagus; and it has been removed accordingly, by the exhibition of tonics and antiſpaſmodics. I ſuſpect that this ſymptom has ſometimes been deſcribed as a caſe of angina pectoris.

MURIATED BARYTES.

The high character with which this medicine was uſhered into practice, induced me to order it in ſeveral ſcrophulous caſes. It is needleſs to give a particular account of my obſervations, for I have never found any ſenſible effect from it, even in doſes of twenty drops, given twice or thrice a-day; excepting in two caſes. There could be no doubt reſpecting the preparation of the ſpecimen I uſed, as it was a ſaturated ſolution, made by Mr. Cooper and

and Mr. Watt; and I was always attentive to its being given in diſtilled water. In the two inſtances where it appeared to do ſervice, the good effect was not very remarkable. I cannot help ſuſpecting, that the only benefit to be expected from it, muſt ariſe from the action of the acid, either not completely ſaturated, or not deſtroyed as a tonic, by the mineral. Several patients, whom I now attend for ſcrophulous complaints, are taking the acid alone with apparent benefit, who had uſed the muriated barytes, without experiencing the ſmalleſt alteration in their health.

REMEDIES OF INSANITY.

It is very difficult to deſcribe complaints of this kind; and expectation is diſappointed in the event ſo frequently, that practitioners are eaſily diſcouraged

diſcouraged from attempting improvements in the method of cure. Books are ſo defective, on this ſubject, that analogy muſt be the principal guide, in counteracting theſe dreadful affections, as they reſemble, more or leſs ſtrongly, nervous and hypochondriacal complaints. I have uſed the different methods recommended by the few good writers on inſanity whom we poſſeſs, and have joined thoſe employed by phyſicians now eminent for the cure of ſuch diſtempers. Some of my obſervations follow.

1. *Tartar emetic.* The exhibition of this medicine, in nauſeating doſes, is a favourite method at preſent, in maniacal caſes. I have uſed it in ſix caſes, in two of which the patients were extremely furious, and have found it of little efficacy, excepting in one inſtance. It was that of a robuſt woman, about twenty-five years of age, who

who had been inſane a few years before, and had now relapſed into a ſtate of furious mania. Her tongue was foul, and her pulſe quick. She took emetic tartar, in ſufficient doſes to ſupport a conſtant ſlight nauſea, and had a bliſter applied, about the ſame time, to the crown of her head. In a day or two, ſhe appeared rather more compoſed, and as ſhe found farther relief from the continuance of the medicine, it was given for a week together. At the end of that time, ſhe was ſenſibly calmer, though there was yet no appearance of recovery. I then dropped the medicine, put her on a courſe of whey, and on low diet, and kept her bowels freely open with magneſia. This method was continued for fifteen days. She was then ordered, in addition, an opiate every night, at bed-time, and was occaſionally purged with black hellebore. Signs of recovery began to appear, under this method; ſhe became dull,

dull, and at laſt tractable and quiet. Her reaſon returned gradually, and after being completely rational for more than a month, ſhe was diſcharged cured, at the end of four months from the time of her admiſſion.

2. *Camphor.* This remedy has been ſtrongly recommended in caſes of inſanity. I wiſh I could add my teſtimony in its favour, but I have found it totally uſeleſs in theſe diſorders, in all kinds of doſes. I have given it with great attention in eight caſes without any advantage. T. R. about twenty-eight years of age, a ſtrong active man, formerly addicted to debauchery of every kind, came under my care, about a year ago. He was in a ſtate of the higheſt fury, ſlept none, and raved without intermiſſion. I gave him fifteen grains of camphor, with two grains of opium, and finding that produce no effect, added eight or ten grains

of

of muſk. As the mania did not leſſen, I went on, till he took two drachms of camphor, a ſcruple of muſk, and eight grains of opium, a-day. This quantity did not produce ſleep, nor make the ſmalleſt impreſſion on the diſeaſe; I therefore diſcontinued it, and had recourſe to,

3. *Opium alone.* The favourable account of the effects of opium alone, given in large quantities, which BERNARD HEUTE has produced, in the appendix to Wepfer's Hiſtoriæ Apoplecticorum, induced me to try it with this patient. Accordingly, the anodyne ſolution, prepared in Dr. Heute's manner, was given as he directs, till we reached the quantity of ſixteen grains of ſolid opium in the day. The patient was not at all better, however, and I had recourſe to other means. I have tried the power of opium alone, in ſeveral other caſes, though not to an

an equal extent, but with no ſenſible benefit to the patient.

4. *Digitalis.* Since this remedy became faſhionable, it has been ſometimes employed with ſucceſs, in caſes of melancholy. The ſympathy often obſerved between the kidneys and the brain, has induced practitioners to uſe diuretics for the removal of infanity, and they are ſaid often to do ſervice. When a medicine, like digitalis, unites ſtrong diuretic to narcotic powers, conſiderable advantage may therefore be expected from it. I have, accordingly, given this remedy even to nauſeating doſes, but with no advantage. It never ſuſpended the appearances of inſanity for a moment. That other diuretics may be uſeful, I have no doubt, for I have found the infuſum diureticum of the former diſpenſatory, (a cold infuſion of ſalt of tartar, and wormwood aſhes) give ſome relief.

5. *Antiphlogiſtic*

5. *Antiphlogiſtic regimen.* Many of the patients, received into our lunatic hoſpital, bring on their diſorder by hard drinking. In ſuch caſes, low diet, and ſaline purgatives generally reſtore health in a moderate length of time. Under ſuch circumſtances, any attempt to ſuppreſs the diſeaſe ſuddenly, I apprehend, would be unſafe. Perhaps maniacal paroxyſms have ſomething like a period, and ought to be conſidered as an acute ſtate of the diſeaſe. I have uſed antimonials in them, however, without ſucceſs.

6. *Bark with opium.* In caſes of deep melancholy, where there was evidently a relaxed ſtate of the ſolids, and in maniacal paroxyſms, where the appearances reſembled thoſe of the low delirium in fevers, I have employed the bark, combined with opium and aromatics, with the beſt effects. I

ſhall give one caſe, as an example o
this method of treatment.

A. W. aged ſixty, admitted Augu
30, 1791, laboured under a total al
enation of mind. Her aſpect was ex
tremely dejected; her ſkin yellow
ſhe often groaned and wept, and wa
perpetually muttering to herſelf. He
pulſe was low and languid. She wa
ordered two drachms of the electuaru
peruvianum, and two grains of opium
morning and evening. For ſome day
little alteration was perceivable, bu
about the twelfth of September, ſh
was well enough to be allowed th
liberty of the gallery, unbound. A
ſhe now ſlept well, I did not think
neceſſary to increaſe the quantity o
opium, and ſhe went on as uſual. A
the beginning of October, her reaſo
had returned in a very great degree
Her legs now began to ſwell, but wer
ſoon reduced, by rubbing them wit
flou

flour of muſtard. She recovered gradually but ſteadily, and was diſmiſſed perfectly well, on the twenty-ninth of October.

7. *Bathing.* The repeated uſe of bathing, either warm or cold, is ſtrongly recommended by the beſt writers. In caſes of melancholy, I commonly uſe the latter, in mania the former. If a maniac be continued in the warm bath for a conſiderable time, he will become entirely paſſive. Immerſion for half an hour, exempting the head, of courſe, commonly produces this effect. T. R. the commencement of whoſe caſe I have given before, continued in a furious ſtate, notwithſtanding the different methods tried with him. I then determined to make him uſe the warm bath, for half an hour at a time, every other morning. I was induced to try this practice, by the praiſes beſtowed on it, in

Pomme's *Traité des affections Vapore*
where he declares that he has
patients with hyſterical mania, in
warm bath, from ten, to twenty-
hours together. It required five
ſix men to carry our patient into
bath, but its relaxing effect wa
great, that one perſon returned hi
his bed, with as much eaſe as if he
been a child. His limbs became
tirely pliant, and he lay in a fo
comatoſe ſtate, for ſome time
being put to bed again. Upon
covering from this degree of to
he was calm, and more rational.
crown of his head was alſo ſhaved,
a ſpunge filled with cold water was
on it for a conſiderable time
day, changing the water as it
its coolneſs. The bathing was
tinued, till the tenth of Nove
when his fury had completely ſubſ
and he fell into the harmleſs, ſt
ſtate, which uſually ſucceeds man
paroxy

paroxyſms. He was ſoon allowed to walk in the gallery, and continued to recover his reaſon, by very ſlow degrees, till the beginning of March, when the only remains of his inſanity conſiſted in a remarkable degree of ſluggiſhneſs. He had been uſing tonics, moderate doſes of opium and camphor, and occaſionally, black hellebore as a purgative. I now ordered him to be electrified every day, which rouſed him conſiderably, and produced a rapid change. I kept him nearly two months in the houſe, after he became apparently well, to aſcertain the permanence of his recovery, and he was diſmiſſed, cured, on the fifth of May.

8. *Drains.* Melancholy and mania are ſometimes produced by the ſuppreſſion of habitual eruptions, or diſcharges, and ſometimes cured by reſtoring, or imitating them. A few years ago, I was conſulted by the friends of

a young gentleman, who had fall
into a melancholy ſtate. I found,
the courſe of my inquiries, that he h
been ſubject, in ſpring, for ſeve
years, to an eruption of the herpe
kind, about the back part of his nec
extending to his right ſhoulder; a
that on its failing to appear, he h
once before become melancholy. It w
deficient at the time of my ſeeing hi
I immediately ordered a ſeton to
paſſed at the nape of the neck.
change was obſerved, till it began
diſcharge. But when ſuppuration to
place, at the end of three or four da
a very fœtid matter began to co
away, and the patient was eviden
better. His mind became every
more and more confirmed, and w
the aſſiſtance of exerciſe, ſea-bathi
and a tonic regimen, he ſoon recove
completely.

L. H. aged forty-eight, admit
July 16, 1791, was in a very low,
ſpond

ſponding ſtate, and fancied ſhe had deſtroyed part of her family. I put her on a courſe of camphor and opium, interpoſing the cold bath, and occaſional purgatives; but ſhe did not begin to recover, till the beginning of September, when I ordered a ſeton to be put in the nape of her neck. As ſoon as it began to ſuppurate, ſhe was ſenſibly better; ſhe afterwards improved daily, and was diſcharged perfectly well, in October. Bliſters generally anſwer very well, when patients are not ſufficiently tractable, to ſubmit to drains that require more management. But ſometimes it is not ſufficient to excite ſimple ulceration on the ſurface, for when a peculiar eruption has been ſuppreſſed, it may become neceſſary to renew it in a ſpecific manner. I was informed, ſome years ago, of a caſe of epilepſy, brought on by the retroceſſion of the itch (in conſequence of ſome external applications)

which reſiſted all the uſual remedies, and became more and more violent. The gentleman who told me the caſe, propoſed to inoculate the patient for the itch. His expedient was adopted, and a plentiful crop of the eruption produced, which freed the patient at once from his fits. The cutaneous diſeaſe was afterwards cured, with proper caution, and the patient reſtored to perfect health.

A peculiar affection of the ſkin frequently appears to uſher in maniacal paroxyſms, and ſometimes to attend them throughout. The ſtate of circulation on the ſurface, therefore, has always been an object of importance to me, and though I have ſometimes failed in altering its morbid condition, yet I think it an indication never to be neglected. When critical eruptions do appear, in complaints of this nature, they give immediate relief.

I have

I have ſometimes been able to predict the return of maniacal fits, by obſerving a peculiar conſtriction of the ſkin of the forehead, attended with a ſlight leaden tinge; the patient's features commonly appear ſomewhat ſharper than uſual, at the ſame time.

9. *Bleeding, and topical evacuations.* General blood-letting is a valuable remedy in young plethoric ſubjects, when the patient is not totally unmanageable. But in the frantic ſtate, when almoſt every muſcle is in violent action, it would be very difficult to perform it, and very dangerous to truſt the wounded veſſel to any bandage. Repeated bleeding, though ſo ſtrongly recommended by Sydenham, would, I am perſuaded be hazardous; for I have often had occaſion to remark, that the ſtrength of a maniac is eaſily, and ſometimes ſuddenly reduced, by evacuating remedies. I have known a ſingle vomit,

vomit, by emetic tartar, bring on
dangerous degree of debility, in conſe
quence of a briſk, but not uncommo
evacuation. The action of cupping
leeches, and bliſters is attended wit
no danger, and may almoſt always b
made to anſwer the purpoſes of gene
ral blood-letting. And in all caſes, i
is a neceſſary caution, that while ma
niacs bear large doſes of opium an
other ſedatives with impunity, we muſ
not reckon on their ſupporting reme
dies, which directly weaken the movin
powers, in an equal proportion.

LINIMENT FOR THE LUMBAGO.

Since the publication of Dr. Home'
preſcription of a camphorated liniment
in this diſorder, I have uſed his for
mula, or one nearly reſembling it, i
ſeveral caſes, with ſucceſs.

Mr

Mr. C ——, in conſequence of expoſure to cold, complained of ſevere pain in the region of the loins, which obliged him to ſit almoſt double. It had continued about a week, when I ſaw him. I ordered the camphorated liniment to be applied: his pain was relieved next day, and at the end of three days was entirely removed.

Mr. ——, after a fall from horſeback, was ſeized with acute pain at the upper part of the os ſacrum, which affected his walking, and diſtreſſed him greatly on ſitting down or riſing up. After ſuffering it near a fortnight, and finding it rather increaſe than leſſen, he applied to me. I directed the application of the liniment, which relieved him conſiderably in the courſe of a few hours. In leſs than forty-eight hours, he was completely free from pain, and ſuffered no relapſe.

William

William Shipton, aged thirty-four, was admitted November 23, 1791, with ſciatica and Lumbago, to a very conſiderable degree. He had been ill for ſeveral weeks. I ordered the camphorated liniment to be applied to his back, and an iſſue to be opened by an eſcharotic, on the outſide of the thigh, near the great trochanter. His back was much eaſier, in two days, and the plaſter was renewed. In leſs than a fortnight, the lumbago was entirely removed, by repeated applications of the plaſter, and he was diſcharged free from complaint, on the nineteenth of December.

I have employed this remedy in ſeveral other caſes of lumbago, both in private and hoſpital practice, with ſucceſs. The form which I have generally uſed in the latter is, two drachms of camphor, an ounce of baſilicon, and half an ounce of black ſoap. It commonly

monly removes the pain within three days, often in a much ſhorter time.

The powers of camphor, externally applied, eſpecially when diſſolved in a ſpirituous menſtruum, appear to be very great. In a painful affection of the joints, of ſeven years ſtanding, accompanied with exoſtoſes of the internal condyle of each os femoris, and extreme ſtiffneſs of the articulations, I have found a ſolution of camphor in vitriolic æther ſuſpend the patient's ſufferings, after all other applications had failed. And in the caſe of a gentleman, threatened with a white ſwelling, the pain, which was very acute, was always taken off for three hours, after the uſe of the ſame compoſition.

EFFECTS

EFFECTS OF DIGITALIS IN ACTIVE HÆMORRHAGE.

The remarkable operation of digitalis, in retarding the pulſe, has naturally ſuggeſted its uſe in caſes of active hæmorrhage. It appears to be particularly indicated, where a tendency to relapſe is preſerved, after the uſual methods of checking the evacuation have been carried as far as prudence, and the ſtrength of the patient will juſtify. I have only tried it in the following caſes.

1. John Fitton, aged forty-ſix, about ſix weeks before his admiſſion, had overſtrained himſelf in dragging a fiſh-pond. The conſequence was, a ſpitting

ng of blood, which did not proceed
exceſs at any one time, but returned
ce in four or five days, upon very
ght exertions. His pulſe was hur-
ed, irregular, and ſomewhat ſharp;
out ninety-five. He was inclined to
ſtiveneſs. I ordered him nitre with
nſerve of roſes, and occaſional laxa-
es; enjoining him reſt, a low diet,
d the uſe of cold liquids. The
emorrhage returned, however, two or
ree times in the courſe of a fortnight.
then brought him into the houſe,
d gave him the infuſum digitalis, in
creaſing doſes. He began with one
ole ſpoonful in the day, and went as
as ſix without inconvenience. In
ree or four days, his pulſe was ſen-
ly ſlower, and more regular, but his
ugh was troubleſome, for which he
s ordered a linctus. He remained a
tnight in the houſe, without any
urn of the hæmorrhage, and was
miſſed, apparently in perfect health,
near

near two months ago. I have n
heard that the hæmorrhage has r
curred.

2. John Walſh, aged twenty-tw
was admitted, November 28, 179
He had been ſubject to frequent r
turns of ſpitting of blood during fo
months, whenever he uſed exertio
He had alſo a tickling cough. H
pulſe was quick, but rather irregula
He took the infuſum digitalis, in t
ſame manner with the preceding p
tient, but never exceeded four tab
ſpoonfuls a-day. By the uſe of th
remedy, the tendency to renew t
diſorder ceaſed, and he was entire
free from hæmorrhage, in the end
December.

3. —— Higgins, aged twenty-eigh
admitted December twelfth, had bee
ſeized with a ſpitting of blood mo
than a year before. He had loſt a le

Th

he hæmorrhage returned frequently, ıt never in a violent degree. He as ſeldom free from it above two ys together. The infuſum digitalis as ordered, in increaſing doſes. His ılſe was oppreſſed, but not ſtrong; wards of ninety in a minute, and egular. On the twenty-ſixth of ecember, he had taken three table oonfuls of his infuſion a-day, with- t inconvenience, and had been free om hæmoptöe for a week. His pulſe s more free and regular, and about hty. The doſe was ordered to be reaſed, and he continued to uſe the dicine till the middle of January, en he was diſcharged, cured.

4. James Sharples, aged twenty- ee, admitted December nineteenth, s attacked by a ſpitting of blood ee days before. He complained of ıtneſs in his breaſt, heat, and of a ling previous to the diſcharge of

blood. His pulſe was quick, and rath
full. I ordered him to loſe twel
ounces of blood, and afterwards
take the infuſum digitalis, with t
uſual precautions. On the twent
fourth, the ſpitting returned in a ſlig
degree, occaſioned by his being ve
coſtive, but ceaſed on procuring him
ſtool, by means of oleum ricini. H
was then taking a ſpoonful of the i
fuſion four times a-day. On t
twenty-fifth, he was free from h
moptöe; but his ſkin was hot a
moiſt, his pulſe conſiderably above
hundred, and his breathing quic
I therefore directed the doſe to be i
creaſed, and enjoined a ſtrict obſervan
of the antiphlogiſtic regimen. On t
twenty-ſixth, his pulſe was betwe
eighty and ninety; on the twen
eighth, it was about eighty-ſix, and
had experienced no return of hæmo
hage. He was again coſtive, and g
ped. Three ſtools were procured b
d

ɔſe of oleum ricini. On the thirtieth, e complained of ſickneſs; he was then king ſix ſpoonfuls of the infuſion day. He had been free from the emorrhage for a week. His pulſe as under eighty, and much calmer. therefore deſired him to leſſen the ſe of the infuſion. On the thirty-ſt, the ſickneſs had ceaſed; there as no hæmorrhage; his pulſe was out ſeventy, and inclined to intermit. is cough was ſtill troubleſome. The ſe of the infuſion was then reduced two ſpoonfuls a-day. His cough ntinued, but was leſs troubleſome, the fifteenth of January.

All theſe caſes of hæmoptöe occurred me, after the ſetting in of the hard ſt, in December, 1791.

HYDROPHOBIA.

I have only met with one caſe of
diſeaſe. An account of it was p
liſhed in the firſt volume of the M
cal Facts and Obſervations, contai
little more than a ſimple narratio
the facts. I have thought, that
importance of the ſubject required
inſertion here, with ſome additi
remarks.

John Johnſon, a labouring m
while he was at work in a by-ſtr
ſome time in July or Auguſt, 17
was ſlightly wounded in the left ch
by a ſtrange dog, which ſnatche
his face in paſſing. He ſuffered
ani

nimal to pafs unregarded, and thought o more of the accident. The bite ealed very quickly. In the fucceed- ng October or November, he was tacked by ftitches in the breaft and des, and a fevere cough, which were l removed by the ufual remedies. I ould obtain no accurate information fpecting thefe dates. In the end of ovember, 1790, his pneumonic com- aints returned; he was then twice ed, and had two blifters applied, ith confiderable relief. On Monday ening, November twenty-ninth, he as perfuaded to drink fome warm gin d water, before going to bed. His ife obferved that he took it with luctance and apparent difficulty, and inquiry, found that his attempts to allow it gave him great uneafinefs. his fymptom increafed very faft, and on became the principal complaint; t during all this time, the circum- nce of the bite was not recollected

either by the patient or his wife; nc
did any ſuſpicion of the true nature
the complaint occur to them. O
Thurſday evening (the fourth day)
neighbour mentioned the poor man
ſituation to a medical gentleman, a
particularly dwelt on his averſion
liquids. This produced an inqui
whether he had been bitten by a d
of ſuſpicious appearance. It was ſo
time before Johnſon could rememb
that he had received a ſlight bite, b
the recollection alarmed him; and
recommendation to the infirmary w
procured, in conſequence of which,
ſaw him on Friday morning (fifth da

I found him feeble, affected wi
tremors, and extremely irritable. H
eyes were wild, yet fearful, and
turned with great quickneſs, towa
the ſlighteſt noiſe. His diſcourſe v
faultering and ſomewhat incohere
and his manner timid and ſuſpicio

was unwilling to own his averſion water, and was deſirous to be told, t the dog was probably not mad. s pulſe was weak and irregular; his gue white; his evacuations were ural.

When I deſired him to drink a little ter, he ſhewed ſtrong marks of diſ-t, but with ſome encouragement, s prevailed on to make an effort. ſoon as he took hold of the cup, erceived ſome ſpaſmodic contractions the muſcles of deglutition; when raiſed it towards his mouth, the ſcles on the cheeks were ſtrongly tracted, and a ſort of convulſive ping came on. He threw ſome of water into his mouth, in a great ry, but it was returned at firſt; a ll quantity at laſt got down, with iolent ſtruggle on the part of the ient, who extended his arms, and ched his hands, while it was paſs-

ing. Deglutition was attended al
with conſiderable, irregular noiſe
the œſophagus. The admiſſion of co
air into the room gave him ſimil
uneaſineſs. When the outer door w
opened, he immediately put up h
hand to the anterior part of the throa
When aſked where the impreſſion w
felt, he pointed to his throat, immed
ately under the thyroid cartilage. H
always ſwallowed ſolids with gre
eaſe.

The ſcar on his cheek, which w
between the ear and the angle of t
jaw, but rather more advanced, w
hardly diſcernible. He felt no ki
of uneaſineſs in it, and there was
diſcoloration. His wife remember
to have ſeen it bloody. He was abo
thirty-nine years of age, and had be
very ſober and induſtrious. I ſent hi
to the infirmary immediately, and o
dered him to take a bolus, containi
a ſcrup

ſcruple of bark, ſix grains of muſk, nd half a grain of opium. He was nmerſed in the cold bath, and was rged to ſwallow, as often as poſſible, draught of vinegar and water. I was nformed that the ſound of water diſ- reſſed him, and being deſirous of aſ- ertaining the fact, I directed a large ır to be emptied in the adjoining paſ- ıge. He was evidently alarmed, and egged to be ſent home, but would ot acknowledge that he was afraid of vater.

At five o'clock in the afternoon, ve met in conſultation, when the hor- or of water, and difficulty of ſwallow- ng liquids, were aſcertained in pre- ence of all the phyſicians to the houſe. t was now late in the fifth day of the iſeaſe, and the patient was evidently nuch enfeebled. We had therefore - othing to expect from medicine, but t ſeemed right to attempt whatever the ituation of our patient could juſtify.

We

We agreed to ſcarify the cicatrix o the cheek deeply, and to apply a bliſ ter over the inciſions; a bolus, con taining a ſcruple of bark, fifteen grain of muſk, and two grains of opium, wa directed to be given every four hours two drachms of ſtrong mercurial oint ment were rubbed in upon the throat arms and groins; a mixture of eigh ounces of diſtilled vinegar, and twelv ounces of decoction of bark, was or dered, of which three or four tabl ſpoonfuls were to be given as frequentl as poſſible; and a poultice, conſiſtin of three drachms of galbanum, tw ſcruples of opium, and one drachm o camphor, was applied, after the mer curial friction, to the throat.

About nine o'clock, the ſame even ing, I ſaw him again. He had ſwal lowed his medicines without muc reluctance, but was incoherent, an complained greatly of cold.

Durin

During the night, his delirium increaſed; he was reſtleſs, impatient and intractable. He had never ſhewed any diſpoſition to injure the people about him, but he now threw himſelf out of bed, and reſiſted the keeper who attempted to replace him, ſo that it was neceſſary to apply the ſtrait waiſtcoat. However, he took four boluſes, and ſwallowed more than a pint of his mixture. He had one ſtool before morning.

At nine o'clock on Saturday morning, the ſixth day, we met again in conſultation. We found that his difficulty in ſwallowing liquids was leſs; he had taken ſome very thin porridge, the uſual breakfaſt of the houſe; and he drank ſeveral mouthfuls of his mixture in our preſence, without any ſtriking appearance of diſguſt. But his eyes were heavy and inclined to fix; his pulſe was much ſunk; and there was

was a conſtant tendency to low deli
rium. We therefore concluded tha
the termination of the diſeaſe was near
but agreed that the method we ha
adopted ſhould be purſued, while h
was capable of ſwallowing. Befor
I left him, he retched ſeveral times
and brought up ſome wind: half
grain of emetic tartar was directed t
be added to his next bolus, but he di
not live to take it. At a quarter pa
ten he ſwallowed ſome of his mixture
and immediately after threw up par
of it again. He then fell into con
vulſions, and died in the courſe of
few minutes.

I was very deſirous to have the bod
examined as early as poſſible, that th
appearances attending this dreadfu
diſorder might be fairly aſcertained
the inflammation of the ſtomach, de
ſcribed in former diſſections, havin
been often attributed to the action o
th

the gaſtric juice. Accordingly, the body was opened by Mr. Simmons, at a quarter before three o'clock, on Saturday afternoon, in preſence of moſt of the phyſicians and ſurgeons to the hoſpital.

In the brain, the only præternatural appearance was, a diſtention of the pia mater, on the ſurface of both hemiſpheres, with a limpid fluid. The quantity of fluid in the lateral ventricles, at the baſis of the brain, and round the ſpinal marrow, appeared to be ſomewhat unuſual.

In the thorax, the lungs were uncommonly ſound, excepting one ſlight adheſion at the poſterior part of the left lobe. The trachea was perfectly ſound. The pericardium adhered pretty firmly to the heart, in its whole compaſs.

In

In the abdomen, the ſtomach and inteſtines ſeemed, externally, ſound; but on opening the lower part of the œſophagus, a morbid appearance preſented itſelf. About two inches above the cardia, the epidermis of the œſophagus was abraded in irregular points, and expoſed an inflamed ſurface of a dark red colour; ſtill lower, the abraſions became linear, and extended into the ſtomach itſelf. The edges of the epidermis, ſurrounding the abraſions, were unequal and elevated. A ſimilar affection was traced along the leſſer curvature of the ſtomach, but growing fainter in its progreſs, to the pylorus, where it was leaſt diſcernible, and about which it ſeemed to terminate. The whole of the inflamed parts bore a ſtriated appearance, reſembling the effect of corroſion, darkeſt in the œſophagus, and lighter and more indiſtinct towards the pylorus. The ſtomach was half full of a dark-coloured fluid,

which

which ſmelt ſtrongly of muſk. The other viſcera were in a natural ſtate.

The length of time which intervened, in this caſe, between the bite and the appearance of the diſorder, was nearly the ſpace uſually obſerved. As almoſt every circumſtance of ſo dreadful, and ſo intractable a diſeaſe is regarded with wonder, this interval has always been marked as a ſtriking peculiarity. It is well known, however, that the action of morbid contagion on the ſyſtem is always delayed for a certain time after its introduction. In the infection of fevers, the interval often conſiſts of many days, and has even been ſaid to have extended to three weeks. The venereal poiſon, applied to the urethra, has been known to produce a gonorrhæa, after an interval of a fortnight; and ſome days always elapſe before it exerts that action. The fact reſpecting hydrophobia

is

is therefore not ſingular in its nature although the duration of the interval unuſually long.

As the principal morbid appearance in this body, was a peculiar inflammation of part of the ſtomach and œſophagus, not ſufficient to account for the death of the patient, I apprehend that we muſt ſtill conſider hydrophobia as a nervous diſeaſe, of unknown nature I believe we may fairly conſider the appearances I have deſcribed, as the proper effects of the diſeaſe, ſince four hours and a half only elapſed, between the death of the patient and the diſſection; eſpecially as the ſtomach contained a conſiderable quantity of fluid It is evident that ſuch a ſtate the œſophagus, joined to an increaſed irritability of the ſyſtem, affords an eaſy explanation of the peculiar ſenſibility to cold water and cold air. But the general diſorder has been known

ex

exiſt without this remarkable ſymptom;* the dread of water, therefore, which has been always conſidered as conſtituting the diagnoſis, is in reality only the ſymptom of a ſymptom. It muſt be obſerved, however, that in Dr. Vaughan's two caſes of hydrophobia, though the dread of water had been felt by both his patients, no inflammation of the oeſophagus or ſtomach appeared on the diſſection of either. Indeed the caſe before us ſhews, that the terror of water does not originate from the local inflammation alone, for the patient was able to ſwallow liquids for ſome hours before death, though the inflammation was certainly exiſting, and perhaps proceeding at that time. The ceſſation of this ſymptom a ſhort time before death, which has been obſerved in ſome other caſes,

* Mead on the Bite of the Mad Dog. Lieutaud, Precis de la Medicine pratique, Art. *Hydrophobia*

is therefore probably owing to
decreaſe of irritability. The eaſe v
which ſolids were ſwallowed by
patient, admits an obvious explanat
In the diſeaſed ſtate of the œſopha
the comparatively ſmall degree of c
traction, neceſſary for the deſcent
animal food, is performed with
difficulty. For the deglutition of
quids, a very ſtrict contraction is
quired, which ſtrains and irritates
inflamed parts, and conſequently oc
ſions great diſtreſs.

In the total want of diſcriminat
characters of the general affection
hydrophobia, it is no wonder that
courſe has been had to analogy; thou
the fallacy of that method is remarka
in nothing more than in patholog
diſcuſſions. The cloſe reſemblance
tween this diſorder, and ſome caſes
tetanus, has been fully eſtabliſhed
Dr. Percival and Dr. Ruſh, and p
h

haps this important parallel includes the principles, on which hydrophobia may at ſome future period be treated with ſucceſs. The facts now aſcertained, of this diſorder ariſing ſporadically, and of its having proved a conſequence of ſimple wounds, or other injuries done to the extremities, without the intervention of any virus, while they prove that hydrophobia is not always the effect of a ſpecific poiſon, afford room to hope that it may yet be cured, without the diſcovery of a ſpecific antidote.

The prevention of hydrophobia, I apprehend, is only to be expected from the immediate deſtruction of the bitten part. This may be effected, either by exciſion, or by exploding with gunpowder. Perhaps it would be better, afterwards, to promote the ulceration of the ſurrounding parts, by canthariides, than by the uſual method of

cauſtic. The action of the latter m
be too ſlow to anſwer the purpo
That the exhibition of internal rem
dies, or the uſe of ſimple external app
cations, ſhould have been ſuppoſed
prevent the acceſſion of hydrophob
can excite no ſurpriſe, when it is co
ſidered, that a ſmall proportion only
perſons really bitten by a mad anim
is liable to ſuffer the diſorder,* ev
when the bite is effectually inflict
with the infuſion of the ſaliva; t
many circumſtances may attend
effort to wound, which may obviate
danger; and that the madneſs of
animal is too frequently left a ſubj
of conjecture.

When the diſorder is aſcertain
very oppoſite methods of cure, ſuppo
to have been ſucceſsful at differ
times, offer themſelves to the mind

* See Dr. Fothergill's Caſe of Hydrophobia, p.

the practitioner. On one hand, large and repeated bleedings, ſucceeded by conſiderable doſes of muſk and opium; on the other, mercurial frictions and the warm bath; while the probable analogy between this diſeaſe and tetanus, impreſſes the advantages of cold bathing, and the moſt powerful tonics.

In different ſeaſons and countries, the degree of inflammatory tendency, in hydrophobia, may be very different; but as a ſtate of extreme irritability always ſeems to accompany its advanced ſtage, I ſhould conceive blood-letting, at leaſt when repeatedly uſed, to be a very doubtful remedy. In my patient, it was prohibited by the ſtate of the pulſe, the advanced period of the diſeaſe, and the free uſe which had been previouſly made of it.

Opium affords a leſs equivocal aſſiſtance, and is indeed ſtrongly indicated

in the confirmed ſtate of hydrophobi
The analogy of tetanus appears
encourage expectation from this r
medy; but in a diſeaſe which, lik
hydrophobia, exhauſts the powers
life ſo quickly, opium cannot, perhap
be ſafely given to an equal extent.
may probably do moſt ſervice, in con
bination with a tonic courſe.

The large uſe of mercurial frictio
is ſaid to have proved ſucceſsful,
this diſorder. This method was pe
haps originally ſuggeſted, by the dete
mination to the ſalivary glands,
remarkable in the courſe of the con
plaint. If ſufficient time were grant
for the action of the mercury, I ſhou
have great doubts reſpecting its oper
tion. Why ſhould irritation ſo powe
ful be added, in a ſtate where exceſſi
irritability is the principal complain
The tendency to inflammation in t
ſtoma

ſtomach and œſophagus, appears alſo to contra-indicate the uſe of mercury.

The uſe of the warm bath was found to give great relief, in the caſe related by Dr. Fothergill. Perhaps, when the inflammatory ſymptoms run high, and when rigid ſpaſms take place, a long-continued immerſion in the warm bath may, as in other ſpaſmodic diſorders, prove beneficial.

But if the analogy traced between hydrophobia and tetanus may be truſted, we muſt in general expect the cure of this diſorder from the free employment of bark and cold bathing, joined with an ample, but judicious exhibition of opium. At all events, a fixed mode of practice ſhould be inſtituted in every caſe; and the practitioner ought not to take off from the power of any one courſe, by mixing it indiſcreetly with other methods.

The efficacy of oil, largely uſed, bo
externally and internally, has be
lately aſſerted in this diſtemper. L
bricating applications may ſometim
quiet the irritation, in the inflam
oeſophagus, and are therefore not to
overlooked. Oil will alſo be more re
dily ſwallowed than other liquids.

A thin mixture of vinegar and br
is ſaid to have cured ſome animals
hydrophobia, in France. If patie
can be induced to ſwallow ſuch a mi
ture, there can be no objection to
Perhaps the admixture of ſomethi
approaching to ſolidity, like bran, m
render deglutition eaſier. As we ha
reaſon to conclude that ſome degree
inflammation ſubſiſts, whenever hyd
phobia comes on, it will be proper
uſe ſome means of removing it. T
application of bliſters to the thr
may therefore be adviſeable; and
the patient could bear the ſteam
wa

warm water, it might be inhaled with advantage, after lubricating the fauces and oeſophagus by giving a mouthful of oil. The dreadful reſolution of deſtroying a hydrophobic patient can never be neceſſary for the ſafety of the attendants, and is not juſtifiable upon any principle in the medical ſuperintendants. I believe it is a very falſe idea, that perſons in ſuch unhappy circumſtances attempt to injure the byſtanders. Timidity, on the contrary, ſeems the prevailing feature of the diſorder. And obedience can at all times be commanded, by the ſtrait-waiſtcoat, even when convulſive motions are apt to come on. I fear it is not unneceſſary to add this caution to the reſt; for I remember an inſtance of ſuch a reſolution, executed with circumſtances of peculiar barbarity, on a poor child, about nine years ago, by the direction of the medical attendants, a few days after the ſufferer was ſeized with hydrophobia.

ORIGIN

ORIGIN OF

CONTAGIOUS, AND NEW DISEASES

In popular queſtions, the topics
diſcuſſion frequently ariſe from part
culars of the ſmalleſt importanc
While innumerable methods are pr
poſed for ſupporting the poor of th
nation, with the leaſt poſſible expenc
it has not been ſufficiently explain
to the public, that their preſent ſitu
ation is extremely dangerous, an
often deſtructive of health and life,
the middle and higher ranks of ſociet
The poor ſtill labour under thoſe hard
ſhips which appear to have occaſione
the frequency of peſtilential diſeaſe

in earlier ſtates of ſociety. Their habitations are ſcanty, cloſe, and filthy; the comforts of frequent change and renewal of apparel are unknown to them; their food is often inadequate to their exertions; and this circumſtance, joined to the mortifying ſenſe of their condition, produces a continual depreſſion of ſpirits, out of which they can only be rouſed by the uſe of ſtrong liquors. From theſe cauſes reſult conſequences ſo extenſively and dreadfully felt, that it will be proper to ſtrengthen my aſſertion of them, by ſhewing that I adhere in it to the opinions of the beſt writers. Moſt of the ancient writers agreed that new diſeaſes were frequently ariſing. Barchuſen, in his chapter de Morborum Novitate, ſays, Plerique veterum inter ſe conveniebant, pauca intercedere, ſed plura morborum genera indies exoriri. This is not true of the ſmall-pox and meaſles only, which appeared

appeared in the middle age, or th
lues, ſudor anglicanus, and other diſ
eaſes well known to be of late date
but the time when hydrophobia an
elephantiaſis were introduced int
Europe is marked by Celſus* an
Pliny;† Plutarch agrees with them
in the traditions relating to theſe diſ
eaſes.‡ Dio Caſſius§ mentions a nev
diſeaſe contracted by the Roman arm
in Arabia Felix. Another diſorder
the lichenæ, or mentagra, which i
now loſt to us, (if it has not dege
nerated into the cynanche parotidæa
or MUMPS) was imported from Aſia t
Rome, and raged among the nobility
according to Pliny.¶ That ſhockin

* Lib. III. cap. xxv. † Lib. XXXVI. cap. i.

‡ Sympoſiac. 8. Queſt. 9. Cælius Aurelianus, howeve
ſays, that hydrophobia was previouſly known, but by
different name. Lib. III. cap. xv.

§ Lib. LIII. ¶ Lib. XXVI. cap. i.

diſorde

diſorder, the plica polonica, made its firſt appearance in the laſt century. Claudinus aſſerts this, in his Practice of Phyſic, and I have ſeen (I think, in the curious treatiſe of Joannes Tardinus *de Pilis*) a copy of the application made by the Poliſh Phyſicians to the univerſity of Paris, in which they deſcribe the diſeaſe as new, highly epidemical, and baffling every effort for its cure.

Gliſſon aſſures us, in his treatiſe on the ſubject, that the rickets were firſt known in England, thirty years only before he wrote. Barchuſen confirms the opinion of its being a new diſeaſe, confined to the weſtern parts of this iſland. The croup was notoriouſly a diſeaſe unknown to phyſicians, within theſe thirty years, and is ſtill confined, in a great meaſure, to the eaſtern coaſt of the kingdom. The leproſy was deſcribed, a few years ago, as a very acute and

and fatal diſorder, in one of the pro
vinces of France; the yaws, the ſib
bens, and other national infectious di
orders, afford ſtrong proofs of the va
riety of animal poiſons, and Mr. Hun
ter, in his excellent book on the Lues
has given good reaſons for believing
that new poiſons are now produce
among the poor of great cities.

The diſeaſes ariſing from wretched
neſs, differ in this reſpect from thoſ
of luxury; the firſt are generally in
fectious, the latter ſolitary, but here
ditary. This obſervation would fur
niſh an excellent moral, but as it i
needleſs to ſuggeſt it, I paſs on to m
next point.

All infectious animal poiſons, tha
of the hydrophobia excepted, appea
to be formed originally from the hu
man body. This has been the opinio
of almoſt every medical writer, ſinc
th

the publication of Sir John Pringle's book on the diſeaſes of the army. Many ſeparate facts, of old date, had pointed out the truth, but, till the diſtreſſes of camps and hoſpitals preſented it to that attentive phyſician, they were neglected and uſeleſs, like many valuable paſſages in the writings of the old phyſicians.

The facts to which I allude, relate to the firſt plagues of Athens and Rome. Thucydides and Plutarch aſcribe the former to the multitudes of ruſtics, introduced into the city by Pericles, and crouded together in huts, within the walls. Livy imputed the firſt plague of Rome, to the number of inhabitants penned up in its narrow limits.

The opinions of phyſicians have been ſtrangely divided, on the origin of infectious fevers. If, as Sydenham has aſſerted, the ſpecies of epidemics be infinite,

infinite, ſuch differences might h
been expected; but a compariſon
accurate deſcriptions (which are
very common, however, in medi
books) does not confirm his opinio
and it is more probable, that all exp
nations being unſatisfactory, auth
equally felt the impoſſibility of acq
eſcing in any one.

As an acquaintance with opinions u
happily forms a large ſhare of hum
knowledge, it is neceſſary to menti
ſome of the principal theories relati
to the riſe of PLAGUE and PEST
LENTIAL FEVER. I place theſe
gether, for I apprehend the plague
be a fever, attended with ſome unuſ
ſymptoms, chiefly produced by
violence. This opinion I have form
principally from Diemerbroek's Caſes
Plague,* which have every character

* Dr. Sydenham has induſtriouſly traced a reſ
blance between the plague and eryſipelas, ſo far wa
from conſidering the former as a peculiar diſeaſe.

accurac

accuracy, and are recommended by the experience and attention of that author, and by the good ſenſe of his practice. And although the ſymptoms of eruptions and buboes be diſtinguiſhed by individual characters in the plague, yet they do not depart, in their general type, very far from the ſymptoms of malignant fevers; for the latter are very commonly attended by flat eruptions, which phyſicians term petechiæ, and glandular abſceſſes are not unfrequent in them; although perhaps ſuch abſceſſes are more rare at preſent, than they were two centuries ago.*

Diemerbroek,

*---Plurimi, iique non vulgares medici, in eam venerint ſententiam, peſtilentiam nihil aliud eſſe, quam febrem ſummé putridam, ac putredinis quodam gradu excellentiore ſolúm ab aliis putridis differentem. Sennert. tom. II. cap. cxxxi.

Hence Dr. Cullen's definition of the plague:

"Typhus, cum ſumma debilitate."

Diemerbroek, Dr. Willis, and ſo
other eminent medical writers of
laſt century, ſuppoſed the plague to
always an infliction from the Dei
others, as Plempius, and ſome ph
ſophers, of whom it is only neceſ
to name Lord Verulam, believed i
be cauſed by demoniacal influence.

Nec poterant quibus id fieret cognoſcere cau
Ergo perfugium ſibi habebant omnia divis
Tradere.
LUCRET. lib. V. 119

It was a queſtion among the phyſicians of th
century, whether the plague could exiſt without a
This was owing, evidently, to the rapidity with
the diſeaſe deſtroyed, in ſome caſes. Diemerbroe
his forty-firſt hiſtory, gives a caſe of a mild pl
ſimilar to the inſtances we ſometimes ſee of mild n
ſmall-pox.

We muſt not ſuffer ourſelves to be deceived by na
λοιμος, Peſtis, μιασμα, only imply deſtruction or d
vation.

Mr. Holwell, and the other ſufferers who eſcaped
the black hole, in Calcutta, underwent in conſequ
a fever which in its criſis reſembled the plague.

W

With reſpect to ſecondary cauſes, peſtilential fevers were commonly ſuppoſed to be produced by a certain ſtate of the atmoſphere, which was conſidered as loaded with the poiſon. To this ſuppoſition Mercurialis properly objected, that if the whole atmoſphere were contaminated, no perſon could eſcape the diſeaſe. Sennertus therefore imagined, that the poiſon was only diſperſed in different parts of the atmoſphere. More accurate obſervations have proved, that the diſeaſe is propagated by contagion alone, and this might have been fully learnt from Diemerbroek's facts, though that author held the contrary opinion.

It was allowed, however, (excepting by Sydenham) that the ſenſible ſtate of the weather had very little connection with the appearance of the plague, as there were examples of its being introduced in all kinds of ſeaſons.

Sydenham owns, that beſides the ſe
conſtitution of the air, infectio
neceſſary to produce the plague. S
phyſicians believed, that partic
aſpects of the planets occaſioned
plague. The conjunction of Ju
and Saturn was reckoned particul
inauſpicious: I remember that a
eight years ago, a pamphlet was p
liſhed, foreboding a peſtilence, am
other calamities, from that ev
There were ſome other idle opinio
more held by philoſophers than by
faculty, ſuch as the production o
diſeaſe by ointments; which is
mitted by Diemerbroek, with
neceſſary qualification, that the c
ingredient muſt be the contag
matter. But the principal ſecon

* That of Paracelſus is the moſt curious and ex
gant. He ſuppoſed that when a man, thinking
plague, looked on the moon, he infected that p
and that the Archeüs, taking fright at the moo
pearance, became frantic, and thus produced the
toms of the plague.

C

cauſe, acknowledged by almoſt all writers, and by ſome conſtituted as the eſſence of the diſeaſe, was putridity. The ancients appear to have acknowledged no difference between the putrefaction of the living and the dead body, and this important diſtinction is too much neglected by modern writers. Living putridity is only marked as *excellentiore gradu*, excepting a writer mentioned by Sennertus, Thomas Minadous, who held, that in the plague there was not proper putridity, but putridity *ſecundum quid*; and Frederic Hoffman, who has expreſſly diſtinguiſhed them, but by a theory of little value: he ſuppoſes living putridity to conſiſt in the corruption of the lymph, and dead putridity in the corruption of the blood.

The diſtinction between them is very obvious in ſome diſeaſes: the laſt degree of putrefaction, the abſolute

death of the ſolids, is ſo far fro
being the laſt ſtage of peſtilential di
orders, that it is a favourable ſympto
in typhus when the nails and extr
mities of the fingers mortify: patien
commonly recover with this appearanc
which is the NECROSIS of Sauvage
And I have been informed, by a ve
reſpectable friend, who now occupi
the anatomical chair in one of t
univerſities of a neighbouring kin
dom,* that while he aſſiſted in t
late Dr. Hunter's diſſecting room,
obſerved that bodies marked wi
petechiæ, therefore probably dead
malignant fevers, did not putrefy
ſoon as thoſe which were entirely fr
from petechial appearances. I ſh
have occaſion to obſerve afterward
that the poiſons produced by th
two different kinds of putridity
communicated, generally, in differe

* Since this eſſay was written, the public has loſt
gentleman alluded to, Mr. Hamilton of Glaſgow.

wa

ways, and give riſe to very different ſymptoms.

It is a general opinion, that peſtilential diſorders are occaſioned by the effluvia of dead bodies, but there is reaſon to queſtion the truth of this. When plague has appeared, in the neighbourhood of places where many bodies had remained unburied, after general engagements, other cauſes can be pointed out, as more likely to have produced it. But many inſtances can be produced, in which thouſands of dead bodies have been left to putrefy on the field of battle, without cauſing peſtilential diſtempers. This was not unnoticed by the attentive Diemerbroek. "Cadavera, ſive hóminum," "ſays he, "ſive aliorum animalium "putreſcentia peſtem non generare, do-"cent multæ magnæ ſtrages, in quibus "talis cadaverum inhumatorum pu-"trefactio nullas peſtes induxit. Anno

" 1642 in agro Juliacenſi, max
" ſtrages facta eſt, et ad minim
" 8000 militum, occiſa fuerunt, pr
" majorem adhuc famulorum, ruſt
" rum, aurigarum, puerorum & r
" lierum numerum, atque equor
" copiam innumerabilem; corpora
" humata ſub diu computruer
" nulla tamen peſtis inſecuta eſt.
" in Germania, durantibus his no
" ævi crudeliſſimis bellis, etiam plu
" mæ maximæ ſtrages factæ ſunt,
" multas tamen illarum nulla peſte ſ
" ſequente" (p. 31.). Theſe facts
ſtrengthened by a well known circu
ſtance, that in no caſe could the ori
of a putrid fever be ever traced to
effluvia of dead bodies in a diſſecti
room. Nor have fevers been obſerv
to originate, or to rage more ſever
in houſes ſurrounding church-yards,
the middle of large towns, though
ſtench of the putrid bodies, over-heap
in ſuch receptacles, is often inſufferab

offenſi

offenſive. It is true, that the putrefaction of dead bodies generates a poiſon, which is highly noxious when received into the living body, by a wound, or any raw ſurface, but this poiſon does not ſeem to infect, like that of fevers, by exhalation, and its firſt effect (unlike the other) is to occaſion the death of the part where it is admitted.

It muſt not be concealed, that noxious effluvia frequently ariſe from putrefying bodies, in a certain ſtate.* Dr. Monro mentions a remarkable inſtance of this, in his Treatiſe on the Dropſy, and ſome later examples are recorded by Mr. St. John. But it does not appear, that in the caſes he mentions, the

* It appears, from ſome late obſervations, made on filtering the vaults of a church, in France, that the *confined effluvia* of putrid bodies produce fever, when brought into action. Perhaps this is the ſolution of the queſtion.

noxious

noxious effluvia produced any ſym
toms reſembling thoſe of peſtilenti
fever; on the contrary, they acted
direct ſtimulus, occaſioning inflamm
tory complaints, from which we m
conclude, that they are eſſentially di
ferent from febrile contagion.

Diemerbroek inclines to think th
the plague may be produced by putr
food, but the inſtances he produces a
chiefly thoſe of long ſieges, where oth
cauſes concur in occaſioning fever
and his principal example, the plag
of Marſeilles, during its ſiege by Tr
bonius, fails him; for Cæſar does n
ſay that the Maſſilians uſed putr
food, but ſtale and ſpoilt corn, whi
only afforded imperfect nouriſhmen
" Gravi etiam peſtilentia conflicta
" ex diutina concluſione, & mutatio
" victus (panico enim vetere, atq
" hordeo corrupto omnes alebantu
" quod ad hujuſmodi caſus antiquit
" paratu

"paratum in publicum contulerant)." Bell. Civil. lib. II. cap. xxii. 1.

It is now generally allowed, that the effluvia of living perſons, confined in cloſe ſituations, produces the poiſon of fever. This has been too fatally proved by the mortality in jails and hoſpitals. Want of cleanlineſs certainly produces the ſame effects; for I have known a peſtilential fever produced in a new-raiſed regiment, in quarters where regular troops are always very healthy, and where there is a conſtant ventilation of the briſkeſt kind.

It is peculiar to the animal poiſons, that they not only give riſe to a diſeaſe ſimilar to their original, but that, however ſmall the quantity applied, they convert a large portion of the fluids to their own nature. Several queſtions ariſe on this ſubject.

1. Does

1. Does contagion operate imm
diately on the nervous or circulati
ſyſtems? From the ſuddenneſs of t
attack, in many caſes, after expoſu
it is commonly, and I believe juſt
ſuppoſed to act immediately on t
nervous ſyſtem.

2. Does it operate by contact only,
ad diſtans? This queſtion once divi
the medical ſchools; but from a vari
of facts, and particularly from th
of Diemerbroek, I think it tolera
evident, that the contagion of fever n
be propagated by an impreſſion on
olfactory nerves. It is uſual for perſ
to complain of an intolerable ſm
about the ſick, when they receive
fection. This mode of infection,
deed, is reſolvable into contact.

3. Does contagion produce both
tridity and contagious matter? T
queſtion was never conſidered, by th

who made the eſſence of peſtilential fevers conſiſt in putridity. At preſent, we know that a patient, labouring under a ſimple nervous fever, without any ſymptoms of putridity who communicates the diſeaſe to two different perſons, may give to one a diſeaſe exactly like his own, and to the other a putrid fever. And the putrid ſymptoms commonly appear ſo late, that they may be properly referred to the conſtitution, and reckoned acceſſory ſymptoms.

4. Does contagion aſſimilate all the fluids to its own nature? I think there are ſtrong objections to the affirmative of this queſtion.

a Becauſe many phenomena, in the ſymptoms and cure of fevers, point out a ſpaſmodic affection, or diſeaſed action of the extreme blood veſſels, as the real cauſe of fever. Ample proof of this may be found in the books of Piens, Hoffman,

Hoffman, and Dr. Cullen. This affection is ſupported by the action of the contagion, and perhaps is ſtrengthened as more contagion is produced. If all the fluids, then, were converted into a contagious maſs, no patient could recover from a fever of a fortnight's continuance.

b Neither would a patient, after recovering from a nervous fever, ceaſe to infect others, till the whole maſs of his fluids were changed.

c Nor would peſtilential diſeaſes be ſo ſpeedily cured, as we often ſee them by throwing in a ſmall quantity of bark and wine, which can only be ſuppoſed to act, by checking the morbid ſtate of the moving fibres. Another queſtion, connected with this and illuſtrative of it, is, whether the dead body of a perſon deſtroyed by plague or fever, be capable of communicatin

nicating infection. On this ſubject, facts are wanting. Rondeletius (as quoted by Sennertus) aſſerted that he had diſſected bodies dead of the plague, in preſence of many of his pupils, with perfect ſafety. Diemerbroek is of opinion that the dead body may infect, while it continues warm. If it be true, that only a part of the animal fluids is rendered contagious, when the patient dies, the exhalation of poiſon muſt be ſtopped by the extinction of the diſeaſe. Many phyſicians of the laſt century, and Diemerbroek among the reſt, however, believed that the putrid dead body was more infectious than the living patient.*

5. It is an important queſtion, whether the contagious matter can be

* Foreſtus thought the dead body leſs infectious. Hoffman. de venen. Corp. Human. tom. I. p. 203. See Garmann De Cadaverum Contagio, on this ſubject, from p. 363 to 371.

deſtroyed,

deſtroyed, as it iſſues from the bod
If, as Mr. St. John imagines, the po
ſon of fevers is a peculiar *gas* exhal
from the ſurface, ſome fortunate di
covery may poſſibly furniſh us wi
the method of neutralizing it, ſo as
prevent it from infecting the patien
aſſiſtants; but experiments are, pe
haps, both too hazardous and too dif
cult, in this caſe.

The ſources of peſtilential diſo
ders, then, of dyſenteries, and ſor
of the worſt cutaneous diſorders, ha
been ſieges, camps, jails, and hoſpita
The plague itſelf appears to origina
with the crouded inhabitants of t
miſerable villages in the eaſt.

It is a fact equally alarming and tru
that many perſons in indigent circu
ſtances, are expoſed, in our great town
to ſuch evils as I have ſhewn to
productive of febrile contagion, a
probab

probably of new diſeaſes. The degree of miſery, exiſting even in manufacturing towns, is only to be credited by thoſe who have witneſſed it. The poor are indeed the firſt ſufferers, but the miſchief does not always reſt with them. By ſecret avenues it reaches the moſt opulent, and ſeverely revenges their neglect, or inſenſibility to the wretchedneſs ſurrounding them.

In all unhealthy ſeaſons, and times of public diſtreſs, the poorer members of the community are moſt deeply injured, and moſt eaſily affected by the cauſes of diſeaſe; all the methods of guarding againſt infection, or of deſtroying it where it has once entered, are to a certain degree expenſive, and require, beſides, an activity not to be expected from the ſullen indolence of the poor. Their want of knowledge, and want of foreſight alſo incapacitate them from any effectual ſtruggles againſt epidemics.

In all theſe ſituations, the circum
ſtances which ſeem, from our inquir
to produce animal poiſons, are, as
have already ſaid, thoſe to which t
poor are ſtill expoſed.

Theſe circumſtances are,

I. Want of freſh air.

II. A deficient or improper diet.

III. Want of cleanlineſs; and chie
ly want of a proper renewal a
change of clothes.

IV. Anxiety and depreſſion of ſpiri

I have placed the laſt among t
efficient cauſes, becauſe it is not prov
that the mere confinement of the eff
via of clean and healthy perſons, f
from mental uneaſineſs, can beco
poiſonous; otherwiſe the cloſe roo
of an elegant houſe might produce

ve

vers, as well as garrets and cellars; beſides, it will be readily admitted as an efficient cauſe, by thoſe who have obſerved the changes in ſores, or ſtumps, occaſioned by paſſions of the mind. * Dr. Hoffman gives an inſtance, from his own knowledge, of death produced by the bite of a man highly enraged, in conſequence of the poiſonous nature of the ſaliva. That the poor perpetuate animal poiſons, cannot be doubted. When a fever either ariſes, or is introduced into the houſe of a poor perſon, every circumſtance favouring its progreſs, it generally attacks the family in ſucceſſion: their clothes, and the woollen and cotton

* One of the ſtrongeſt ſhocks ever given to the humoral pathology, is the cure of ſiphylis effected by opium.

Diemerbroek produces ſeveral facts to prove, that fear and anxiety render perſons particularly liable to the attack of plague.

parts of their furniture become infect
retain the infection tenaciously, and
capable of communicating the dise
for a long time. These they can n
ther afford to purify or destroy. T
their dwellings and persons continu
breathe contagion; and where thi
the situation, not of one family o
but of a very great number, it is ha
possible to prevent the communica
of the disease to the families of
rich, among whom it would never
been produced.

We are told by Diemerbroek, th
was a common practice in Italy
France, when the plague appeare
any large town, to drive out the
immediately;* so fully were the m
strates convinced that the disease

* At the commencement of the plague of Ma
all beggars were ordered to quit the town. Acc
the Plague of Marseilles, 1721.

pres

reſerved and propagated by them. It well known that a nervous fever of e worſt kind is rendered endemical in dinburgh, by the practice of mewing families in ſmall ſubterraneous vellings, where the contagion is con-ntly reproduced. The cellars ſo fre-ently inhabited, in this place, are tter ventilated than thoſe of Edin-rgh, but may become pernicious alſo, hen age ſhall have rendered them ually dirty. I have known a nervous er, which was putrid alſo in many es, preſerved in a ſmall town, for noſt two years, among the poor alone. e manner of building practiſed there s evidently the cauſe. The principal eets are wide, and laid down at right gles; but the poor are pent up in all houſes, huddled together in nar-v alleys, which are commonly ſhut at one end. But one of the moſt sfactory inſtances of this ſort, was ſerved by Dr. Heyſham, at Carliſle, in

in 1778 or 1779. A fever of the ne
vous kind raged in that city, which d
not ſeem to have been introduced fro
any neighbouring place. Dr. Heyſha
with great induſtry, traced its origin
a houſe near one of the gates, whi
was tenanted by five or ſix very po
families; theſe unhappy creatures h
blocked up every avenue of light (
Dr. Heyſham expreſſes it) with whi
even wretchedneſs could diſpenſe,
leſſen the burden of the window-ta
and thus contaminated the air of th
cells, to ſuch a degree, as to produ
the poiſon of fever among them.

Thus it appears, that the ſafety
the rich is intimately connected wi
the welfare of the poor, and that
minute and conſtant attention to th
wants, is not leſs an act of ſelf-preſe
vation than of virtue. For we are n
only expoſed now, to the ravages
diſorders, the poiſons of which
perpetuat

perpetuated in the abodes of miſery, but we are threatened with the riſe of new contagions, the danger of which cannot be foretold, nor perhaps the remedies eaſily aſcertained. In this the true danger of luxury conſiſts, which I think authors have too much overlooked: the exceſſes of an individual, in their direct conſequences, affect only himſelf and his family: but when voluptuous habits induce him to withhold his real ſuperfluities from the indigent, he contributes to the diſeaſes and deſtruction of thouſands.

Accident and misfortune have too often done thoſe ſervices to mankind, which wiſdom would not have been permitted to render. The fire of London extirpated the plague in this country, and even the blow of an aſſaſſin once proved a ſalutary remedy. Perhaps ſome ſuch extraordinary circumſtances

ſtances muſt do for us, what it is in o
power to do for ourſelves, in diſarmi
the virulence of animal poiſons,
increaſing the happineſs of our fello
creatures. To imagine, that by a
human prudence, all miſery (even fro
indigence) can be relieved, or all co
tagion deſtroyed, would be ridic
lous; but as events, unexpected,
certainly not promoted with this vie
have abated the frequency and violen
of ſome epidemics, I ſee no reaſon
doubt, that prudence, by imitating ſu
operations, may ſtill farther leſſen t
evils of diſeaſe. In any event, a clo
attention to the comfort of the poo
than is commonly practiſed, is a deſir
able object of attainment; and it m
excite the benevolence of ſome men,
they can be convinced, that acts
charity will not only ſerve them
another life, but promiſe them a long
enjoyment of the preſent.

THE END.

BIBLIOTECA BODLEIANA

MEDICAL HISTORIES,

&c.

MEDICAL HISTORIES

AND

REFLECTIONS.

VOLUME SECOND.

BY

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ASYLUM.

ΜΙΚΡΑ ΤΕ ΜΕΓΑΛΩΝ, ΚΑΙ ΟΛΙΓΑ ΠΟΛΛΩΝ.
DIONYS. HALICARNASS.

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MDCCXCV.

PREFACE.

At this time, when the attention of the medical world is supposed to be again fixed on system and hypothesis, some apology may seem necessary for the publication of a work, conducted on the strict principles of inductive philosophy. The favourable manner in which the former volume of these Essays was received, emboldens me to lay

lay before the public the fru
of two years' additional labou
and I am encouraged by consi
ering, that the most splend
theories must be ultimate
judged by careful, and repeat
observation.

I confess myself to be amo
the number of those who thi
that after all the improveme
in medicine, to which the p
sent century has given rise, t
science is not ripe for a final
rangement. Physicians ha
not pursued the instructions
BACON, for a period of time s
ficient to have fulfilled his
tentions; and I cannot percei

t

that any of our most daring, or curious enquirers, have deviated, with advantage, from the prospects of that great mind. We may even obtain, from his own words, a just representation of the present state of medical philosophy, if allowance be made for the quaintness of his mythological allusions. "To "say the truth, I am of this "opinion, that those two facul- "ties, *dogmatical* and *empirical*, "are not as yet well joined and "coupled together, but as new "gifts of the gods, imposed "either upon philosophical "abstractions, as upon a flying "bird,

" bird, or upon slow and d
" experience, as upon an a
" And yet methinks, I would n
" entertain an ill conceit of th
" ass, if it meet not with the a
" cidents of travel and thin
" For I am persuaded, that wh
" so constantly goes on, by t
" conduct of experience as by
" certain rule and method, a
" not covets to meet with su
" experiments by the way,
" conduce either to gain or c
" tentation, may prove no un
" porter, to bear his new add
" tion of divine munificence*.

In the mean time we have
complai

* Bacon's Wisdom of the Ancients, s
titul. Prometheus.

complain, that with every attempt towards the formation of a system, new applications of words are introduced, which, though desirable in the art of poetry, are very inconvenient in pathological books, especially when this is done to give an air of novelty to old theories and observations. For between the ancient language, which practitioners cannot entirely reject, and the new dialect, which they cannot wholly adopt, the style of medical books is reduced to a kind of jargon, that the author himself may possibly understand, but which his readers find it very difficult

difficult to unriddle. Henc
results a neglect of medical liter
ature, and hence the perniciou
habit of regarding as new, what
ever has not appeared in th
publications of the last hal
century.

To those who indulge a hop
that a new æra is opening i
medicine, that the springs of liv
ing Nature are discovered, an
that their direction will hence
forth be placed in the hands
the chemical physician, these re
marks may appear obsolete an
discouraging. But from my ex
perience of the effects of pneu
matic medicine, I am incline

to believe, that its real importance will not be quickly ascertained. It may form a valuable addition to the Materia Medica, but I do not expect from it a renovation of the science of medicine itself.

Whatever may be the opinion formed of my conclusions, I hope the following collection will be found accurate in point of facts. In the practice of medicine, as in all other occurrences, we derive instruction, not less from disappointment than from success. It is, indeed, painful to hear of plans disconcerted, and opinions contradicted

ed by experience, and to to
through a course of observation
divested of brilliant events, an
magnificent expectations. Bu
I have endeavoured to conve
faithfully, the impression whic
I have received from a gre
number of cases. Whether th
result be consonant to som
prevailing notions, I shall n
decide: it is enough for me th
I know it to be true. *Non eni*
me cuiquam mancipavi, nullius n
men fero: multum magnorum vir
rum judicio credo, aliquid et m
vindico. Senec. Epist. 45.

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CONVERSION

OF

DISEASES.

MEDICAL HISTORIES

AND

REFLECTIONS.

OF THE CONVERSION OF DISEASES.

Emovit veterem mirè novus.

HOR. SATIR. l. 3. sat. 3.

1. A disease is said to be converted, when new symptoms arise in its progress, which require a different designation, and which either put a period to the original disorder, or combining with it, alter the physician's views respecting the prognostics, or the method of cure. Many instances of this kind are familiar, as the conversion of intermittents into continued fevers, or obstructions of the viscera; of hæmoptöe into phthisis, of jaun-

dice into dropsy, and the like. Others
more unusual, and unexpected, and dese
to be noticed, because they occasion m
perplexity when they occur in pract
especially as this subject has been almost
tally overlooked by medical writers.

2. We owe the first observations on
subject of Conversion, to HIPPOCRATES,
his annotators. HOFFMAN has scar
touched on it, in his short dissertation, *de M*
borum transmutatione. BAGLIVI, though v
desirous that it should be treated at len
and though liberal in promises of assista
confines his recital of facts in a great mea
to those of HIPPOCRATES. The only
press treatise that I know on this subjec
the QUÆ EX QUIBUS of RODERICUS A C
TRO; a quaint title, which the author t
from one of the aphorisms, and which,
says, ought to have been, *Quæ ex Quibu*
quos. This is a book better conceived
executed, for to the usual error of that t
the making unprofitable commentaries on

Prorrhe

Prorrhetica, this author has added that of considering many common symptoms of diseases as cases of conversion. It is not destitute, however, of useful observations, and we can only wish, that of these the author had been somewhat more liberal.

3. This subject was formerly arranged under two divisions; when the original disease subsisted after the accession of the second, it was termed a case of *Epigenesis*, or *propagation*; when the second disease put a period to the first, it was called an instance of *Metaptosis*, *Metastasis*, or *translation*. With so loose a distinction, which excludes many cases of conversion, it cannot be wondered, that neither DURET, in his notes on the aphorisms, nor Dr. DE CASTRO, acquired an accurate knowledge of this matter. For the chief difference between the *Metaptosis* and *Epigenesis* is, that the relation of the successive morbid appearances, and their dependance upon each other, cannot be so clearly perceived, in one case as in the other. It would

would have been more useful, to have
tinguished conversions by their influenc
the event of the disease, as some are dan
ous, and generally fatal; others, while
terminate the original disorder, conduce
more speedy restoration of health. T
when a continued fever supervenes to p
monic inflammation, the patient is in
danger; it is *gravi malo grave malum*
dere; when a diarrhæa supervenes to
tinued fever, in certain stages, it termi
the fever earlier than the regular cours
the disease would have done.

All cases of conversion may, perhaps
conveniently referred to the following he
I. The supervening disease may be produ
by the remote causes of the original diso
in this case, the action of those causes,
producing its first effect, is prolonged
to excite a new train of symptoms. II.
supervening disease may arise from the
cess, or combination of the symptoms of
original complaint. III. The state of
ha

habit, produced by the first disease, may give rise to a new disorder. IV. Conversions may happen, from the imprudent suppression of habitual diseases. Anomalous cases may occur from the coincidence of independent diseases, or from the mixture of two or more of these sources of conversion.

I. The application of certain remote causes may be sufficiently powerful, to produce a fresh disease, after the first has been brought on by their action. It is common to find pneumonic inflammation supervene to typhus, by a continuance of the application of cold or dampness, which operated as a remote cause of the fever. On the contrary, from the tendency of the system to inflammation, or from the manner in which cold has been applied, the pneumonic symptoms precede the fever in some cases, and even run their course, before the fever assumes a regular form. I have seen a case of peripneumonia notha end in typhus, and the typhus in mania. In a fatal case of the conversion of pleurisy in-

to typhus, the left lobe of the lungs was destroyed by suppuration *.

In a peripneumony, symptoms of phrenitis supervened on the fifth day, and the patient died on the seventh. The left lobe of the lungs was found suppurated; the vessels of the brain were distended with blood, and the turns of the brain were filled with a bloody, serous effusion †. I have seen a general rheumatic affection, accompanied with swellings and inflammation in the larger joints, converted into a typhus in the first week; and on the contrary, I have more than once found a lingering typhus terminate in rheumatism, but this last case does not come under the present division.

I believe the conversion of the mild synochus, or typhus, to inflammation of the peritoneum, or villous coat of the intestines, may be

* Lieutaud. Hist. Anat. Med. t. 1. p. 533. ob. 378.

† Ib. p. 472. obs. 137.

be referred in many cases to the action of the remote causes of fever. This conversion certainly terminates the original fever; and the diarrhæa, which is often a principal symptom of the inflammation, sometimes accedes immediately after the feverish attack *. I have seen this conversion take place, and the inflammatory symptoms have run very high, when the patient was covered with petechiæ.

When the villous coat of the intestines is inflamed, obstinate vomiting is commonly a symptom, besides the distension and pain of the abdomen †.

The presence of irritating matters in the alimentary canal sometimes produces singular conversions, in the beginning of fevers. A patient, at the first attack of a rheumatic fever, was affected with epileptic fits, to which he had never been formerly subject. Suspecting that they were occasioned by the stimulus

* Lieutaud. lib. 1. obs. 336.

† Ib. lib. 1. obs. 334, 338.

stimulus of accumulated bile, I ordered a vomit, which brought off a large quantity of green bile, and relieved him entirely from the convulsions. In the course of the fever, the convulsions returned slightly, and were again removed by some doses of calomel, which always produced green stools. This kind of conversion is noticed, in Lommius's *Observationes Medicinales*.

I have seen cholera converted to typhus, and as might be expected, a long and dangerous fever produced. There was an uncommon appearance of stupor, at the first attack of cholera, which continued, and increased after the symptoms of that disease were abated, but the brown list on the tongue did not appear till several days afterwards. Dysentery and diarrhæa are often converted to continued fever; but diarrhæa may be considered almost as a symptom of the feverish disposition, and as the forerunner of typhus.

Hysteria

Hysteria is not unfrequently converted into epilepsy and insanity, by the continued action of its remote causes. I have seen the discriminating symptoms of both diseases so much intermixed in the paroxysms, that it was impossible to determine which of them predominated. In one case of this sort, a conversion into mania took place, but the change was perhaps decided by the violence of the passions; in another instance, after a long struggle, hysteria prevailed. When somnambulism has attended the first appearance of such mixed diseases, I have known symptoms of oppression of the brain come on, and the patients have died lethargic.

When epilepsy has supervened to anasarca, and proved fatal, water, as might be expected, has been found on the surface, and in the lateral ventricles of the brain; the *plexus choroides* was likewise full of hydatids *.

In

* Lieutaud, Hist. Anat. Med. t. 2. p. 185. obs. 167.

In a child, two years of age, I have seen a paralysis of the right side converted to hydrocephalus; the sutures of the cranium separated *. Here, as in some other instances, the original disease was constituted, by the appearance of symptoms unusual in the first stages of hydrocephalus, although there was a perfect unity of cause. Probably, the paralytic form resulted from the superior degree of compression, which the brain must have suffered before the opening of the sutures.

I remember a case, in which the progress of paralysis in one arm and one leg, was evidently connected with the increase of scrophulous swellings on the upper part of each of those limbs. Eight months after the appearance of the paralytic symptoms, the patient complained of severe head-ach, vision became indistinct, and at length was entirely lost. Epileptic fits then came on, and he died comatose. When the head was opened,

* Med. Hist. and Reflections, p. 102.

ed, the ventricles of the brain were found full of water, and several tumors, which, in the prevailing medical language, might be called scrophulous, were observed in different parts of the brain. In this instance, the conversion from a slight scrophulous affection to palsy, epilepsy, and coma, was in reality the regular progress of the disease, uniform in its cause, but too obscurely indicated to be originally considered as one affection, diversified in its symptoms. It is not impossible, that scrophulous ophthalmia may be sometimes supported by similar, but less important læsions of the brain.

Cases of hysterical conversions, which belong to this head, are very common sources of error to young practitioners, and sometimes deceive even the most experienced. Whoever would present us with a good book on the *fallacy of symptoms*, which is greatly wanted, must be completely master of this unaccountable disease.

We

We are ignorant by what laws the body possesses a power of representing the most hazardous disorders, without incurring danger; of counterfeiting the greatest derangement in the circulating system, without materially altering its movements; of producing madness, conscious of its extravagancies, and of increasing the acuteness of sensation, by oppressing the common sensorium. In hysterical affections, all these appearances are excited, which are incompatible with the reasonings of every system-maker, who has yet endeavoured to explain the inexplicable. Nature, as if in ridicule of the attempts to unmask her, has in this class of diseases, reconciled contradictions, and realized improbabilities, with a mysterious versatility, which inspires the true philosopher with diffidence, and reduces the systematic to despair.

I have met with several cases of hysterical hæmoptöe, in which the quantity of blood evacuated was very considerable; six or eight ounces were sometimes spit up daily, for a fort-

a fortnight or three weeks successively. Most of the usual symptoms attended, which denote danger in this complaint, when it arises from other causes, but the equal, moderate state of the pulse, and the appearance of some degree of the globus hystericus, seemed to determine the nature of the complaint; a conversion, accordingly, soon took place to the ordinary hysteric paroxysm, and no bad consequence followed the hæmorrhage from the lungs.

When the hysteric disposition is set in motion, it is not uncommon to find many of the different viscera attacked by it in turns, and the diseases peculiar to each counterfeited with much exactness. I have seen symptoms of paralysis, jaundice, palpitation, and nephritis, succeed each other rapidly in the same patient, while some of the characteristic marks of hysteria have been discernible, and where the unity of the disease was proved, by the disappearance of all menacing affections, on the approach of regular fits. In one case, the bowels were attacked, and the

symptoms

symptoms of enteritis were so precisely imitated, as to give much alarm for the patient's safety. I suspected the real nature of the disease, from observing that the pulse was soft and full, that the evacuations were natural, and that her spirits were agitated, even to involuntary emotions, by slight causes. This case terminated successfully, on the accession of clear hysteric symptoms.

In all similar instances, the supervening hysterical paroxysm puts a favourable termination to the irregular appearances.

Several years ago, I attended an elderly lady, for a complaint which seemed to vibrate between apoplexy and palsy; after lying for several weeks in a state which afforded little hope of amendment, she was affected with involuntary sobbing and weeping; the complaints in her head and limbs were converted into hysterical convulsions, and she recovered completely.

It is very common to meet with syncopé, or palpitations of the heart and great vessels, accompanied with a soporific depression, or extreme dejection of strength and spirits, and converted, after deep sighing or discharge of tears, into the hysterical paroxysm. In these cases, the pulse is sometimes full and regular, during the most alarming appearance of sinking; and sometimes variable to such a degree, as to exclude all conjecture, excepting that of an hysteric origin.

To this head also belong the facts of vicarious hæmorrhage: these have been so well explained by different authors, that I shall only mention one or two remarkable occurrences of this kind, which I have met with. A shoemaker, about forty years of age, was suddenly seized with a continued bleeding from the urethra, without effort, or any desire to pass urine. When I saw him, an hour or two after the seizure, the blood flowed slowly, but without intermission. Upon pressing the lips of the urethra together for a few

a few minutes, he became uneasy, and when the blood was suffered to pass again, a small coagulum came off. He said, that clots of blood were discharged sometimes, even when he had not attempted to restrain the hæmorrhage. The only cause to which this singular phænomenon could be referred, was that he had been accustomed, during several years, to be let blood once in six months, and that he had omitted this evacuation, for three years preceding the hæmorrhage I have described. After continuing upwards of twelve hours, during which the blood soaked through the bed-clothes, and overspread great part of the floor, the hæmorrhage ceased, and the patient recovered.

A young girl, subject to amenorrhæa, was affected, during the absence of the periodical discharge, with ulceration of the navel.

I have known rheumatic pains and leucophlegmatic swellings produced at the same time, by the application of cold; and in some cases

cases of general dropsy, succeeding exposure to cold, there has been much pain and stiffness of the limbs, at the commencement of the disease. I have even seen anasarca and typhus produced by the same degree of cold, at the same time.

Conversions of the different genera of fever into each other are so common, and so well described by practical writers, that I shall content myself with indicating, that in many cases they belong to this head. Conversions of intermittent to continued fevers, and of synochus to typhus, are those which may be properly comprehended here.

II. The symptoms of an idiopathic disease may, by their violence, assume the appearance, and require the attention due to a new complaint; or affections of particular viscera, which, in their incipient state, are only regarded as symptoms of general indisposition, may, as they gain ground, extinguish the original disease, or be protracted beyond it.

This head comprehends such a variety of cases, that to treat it fully, would be to give the history of all symptomatic diseases. I shall therefore confine myself, to cases which have come more immediately under my own observation.

I have known the catarrhal affection, which so often accompanies synochus, converted to a harrassing cough, of the most alarming nature, attended with a very great expectoration. When symptoms of pneumonic inflammation supervene to typhus, there is always great reason to apprehend a consumption. In many instances of the phthisis mucosa, which I have seen succeed to typhus, the lungs seemed to have acquired the habit of secreting an unusual quantity of mucus, from encreased irritability; for I have found, that by removing the patients to a drier situation, and purer air, the quantity expectorated has been quickly reduced, from a quart or more, to a few ounces in the day *.

Dr.

* I have also found *digitalis* serviceable, in similar circum-

Dr. Percival informs me, that he has seen an effusion into the cavities of the brain, produced by the violent succussions of coughing, in a confirmed pulmonary consumption, which effusion terminated fatally, with a previous suppression, more than a week before death, of all the pulmonic symptoms.

I have seen the hæmorrhagic effort, which is not an unfrequent symptom of typhus, when directed to the bowels, extinguish the fever, and become an alarming disease, by its duration, and by the quantity of pure blood passed with every stool.

The dyspnœa which is so often converted into

circumstances, whether by diminishing general irritability, or by lessening the determination to the lungs, in consequence of its diuretic power, I cannot decide. But I have repeatedly stopped the progress of incipient consumptions, by administering this remedy, when the patient was too much weakened by preceding disease, to bear the usual methods of lessening the impetus of the circulating system. The florid consumption seldom appears among the natives of Manchester.

into general dropsy, frequently puts on every appearance of asthma, before the swellings commence. In one case of this kind, the difficulty of breathing, and pain in the breast were so urgent, that I found repeated bleeding necessary to relieve the patient*. In this case, respiration was stridulous, and the voice was scarcely articulate before bleeding.

The dyspnœa and dry cough, on the contrary, which are converted into hydrothorax, are commonly accompanied with much extenuation and general debility, and are chiefly to be traced to their real cause, by the torpor of the left arm, or by shooting pains, extending to the fingers of either, or both arms.

It may not be irregular to mention in this place, that the pain in the lower part of the abdomen, with which I have generally seen dilatations of the heart accompanied, is sometimes so urgent, that the patient hardly makes any

* See Hist. 49, of the Remedies of Dropsy.

any other complaint at the commencement of the disease. Lieutaud has mentioned severe pain in the region of the stomach, as a symptom, in two cases of dropsy of the pericardium, with dilated heart. In one, at present under my care, the pain was originally in the hypogastric region, but has now fixed in the region of the stomach.

In a case of acute rheumatism, I have seen the swellings of the fore arm suppurate in different places, so as to produce a succession of abscesses, which were all opened with the knife, and healed readily. In opening one abscess, the nerves, supplying two fingers, were divided; the fingers were paralytic for some weeks after the incision was healed, but their sensation and motion were gradually restored, and the patient entirely recovered the use of them.

It is one of the most perplexing occurrences in medicine, when the supervening disease is produced by a symptom of some latent

latent complaint; when, for example, phthisical symptoms arise in a scrophulous or gouty patient, who exhibits, at first, no other appearance of those two diseases. I remember an instance, in which all the characters of confirmed phthisis pulmonalis were present, that terminated in recovery, upon the patient's coughing up some solid particles, which upon examination proved to be chalk-stones. Some other cases, exactly similar, have been mentioned to me in conversation, by different practitioners. Several instances, which are commonly named misplaced gout, are in reality conversions, and of a kind very apt to mislead the judgment. For the following very remarkable case, I am indebted to Dr. Percival.

" A gentleman of rank in this county, was " supposed to be in an advanced state, of what " is called a galloping consumption, having " an incessant cough, an expectoration ap- " parently purulent, continued heats, and " night sweats. Yet his cure was accom-

plished

"plished by giving wine-whey copiously, and "by administering doses of hartshorn and "spermaceti. A gentle fit of the gout was "produced, by this cordial regimen. The "fever, cough, and spitting, progressively "abated, and the health of the patient was "soon perfectly re-established."

I have seen an effort of this kind spontaneously made, at the close of a phthisical complaint, in a very exhausted habit; but though one great toe inflamed considerably, the patient was too completely reduced to derive much benefit from it.

There is a strong resemblance between hysteria and gout, in the power of counterfeiting different diseases, but with this material distinction, that the hysterical representations are commonly void of danger, while those produced by gout are often more dangerous, than the simple disorders which they imitate. The hysterical hæmoptöe, for example, is seldom productive of bad consequences,

quences, but the arthritic apoplexy, pneumonia, and cardialgia, are much more alarming, and run their course quicker, than similar complaints originating from other causes. But these diseases agree in this respect, that the accession of the regular paroxysm puts a a favourable period, to the irregular symptoms of each.

Irregular intermittents have occasioned palpitations of the heart, at their first accession, so violent, as to give supicion of an organic læsion in that viscus. One mark, by which this case may be distinguished is, that before the palpitation becomes troublesome, or the stroke of the heart so loud as to be heard by another person, the patient always feels a strong sensation of closing in the region of the heart. A farther distinction is, that this sort of palpitation always attacks in paroxysms, though the patient is never free from irregularity in the motions of the heart; and the accession of the paroxysm generally happens in the evening, or early part of the night.

night. In cases of this kind, I have known the convulsion of the heart attended with palpitations in the subclavian and carotid arteries, and sometimes with distressing palpitations of the iliac and femoral arteries, tingling pains shooting to the points of the fingers, and occasional swelling of the face. But the intermittent type still appearing, and the apex of the heart striking in the usual place, I have removed the complaint entirely, by bark, sea-bathing, and exercise on horseback. Mr. Pomme, in his curious treatise *des Affections Vaporeuses*, says, the hysteric epilepsy may be known, by its occurring at the menstrual periods. I have found it a permanent disease in several instances, and its nature was only to be detected, by the patient's retaining some degree of recollection during the fit, or by the concomitancy of globus hystericus.

Gout is sometimes converted into rheumatism, when the arthritic tendency to the extremities takes place in very irritable habits.

its. I have known the large joints affected with tumor and inflammation, when, from the sympathy of the stomach with the pained parts, and from the symptoms preceding the seizure of the joints, there could be no doubt of the gouty nature of the disease.

Dyspeptic symptoms are often produced, in the incipient state of pulmonary consumption, and subsist for a considerable time, before any affection of the lungs is indicated, insomuch that a conversion appears to happen, of dyspepsia to phthisis. I believe the affection of the stomach, in such cases, is sympathetic, and affords one of the most intricate examples of masked disease. The origin of this fallacious dyspepsia may be suspected, when there appears more languor than real debility, connected with indigestion, and frequent vomiting of small quantities of pure bile; when the patient is often liable to torpid oppression, chiefly when the stomach is empty, and when, upon the return of his vivacity, his faculties appear rapidly and considerably

siderably improved. There is also great impatience of scenes to which he has been accustomed, and a kind of appetite for travelling. In the mean time, the body wastes, and a short cough, which was almost unheeded at first, becomes more and more troublesome. The expectoration, which appears to consist of nothing but mucus, and from its facility, resembles the spitting familiar to hypochondriacs, encreases gradually in quantity. In this state, I have found the patient liable to violent circumscribed pain in the bowels, a little higher, but more forward than the spine of the ileon.

Another symptom of dyspepsia, frequently deceives even experienced practitioners; this is, a pain in the right side, in the region of the liver, commonly fixed, but sometimes shooting back towards the spine. With this, there is often a slight, but permanent yellow suffusion of the eyes and countenance, great anxiety, frequent distention of the abdomen, and before the returns or exacerbations

tions of pain, the urine is of a bright g
colour. The tongue and lips grow dry,
are divided by fissures; the former is co
ed by a rough bilious crust, and the
swell slightly in the evening. The pai
the side is sometimes very severe, and is
attended with pain on the top of the
shoulder. These symptoms altogether,
such strong suspicion of an hepatic affec
that it is not to be wondered, if we find
of this kind too readily treated as s
From careful observation, however, part
larly in my own case, when I suffered
complaint several years ago, I have no do
that all these symptoms may be produced
acidity in the stomach, and a spasmodi
fection of the duodenum, without any or
ic læsion of the liver. The distinctio
that the pain may be felt to change its pla
little, on the expulsion of wind. The p
likewise is soft, though very irregular.
secretion of mucus from the schneide
membrane is interrupted, and someti
nearly ceases, though the patient feels a

qu

quent inclination to discharge it. He is generally, but not obstinately, costive, and subject to torpor, and nervous oppression. A slight inflammation of the fauces also attends this disorder, returning once in eight or ten days.

The method which I have found most successful in this disorder, is to give repeated small doses of the tinctura alöetica, so as to keep the body rather loose, to use daily exercise on horseback, and to reside in the country, or at least, to avoid sleeping in a town.

Dr. Hoffman has treated this subject with great accuracy, in his little tract, *De Duodeno, multorum malorum causa.*

I have found this pain connected, and apparently convertible with nephritic symptoms; in this case, which was obscure, it continued for several years, without threatening the patent's life, yet there was no bili-

ous

ous evacuation, either by urine or stool, no discharge of gall-stones. I believe in such cases, a laxative diet, consisti vegetable food, and of butter-milk la used, may prove more efficacious than course of medicine.

The affection of the head, in mixed of gout and hysteria, sometimes rises to gree of paralysis; speech is interrupted the power of voluntary motion on one greatly diminished. But the origin of kind of palsy is, in general, to be trace the presence of globus hystericus, or b voluntary sobbing and weeping having ceded it, at no great distance. In cases, the gouty irritation, in painful, ir lar fits, is converted to hysterical affec but I have not observed that the gouty oxysm was shortened, or the pains muc lieved, by the hysterical accession.

The prognostics, in conversions of second class, must evidently vary, acco

to the seat and degree of the supervening disease, and its favourable or unfavourable action upon the original disorder.

III. The original disease, if acute, when it has run its usual course, may leave the habit in a state favourable to the production of another disease; or if the original be a chronic disorder, such a state of the habit may take place during its continuance, and the accessory disease may be simply super-added, or it may vary the form, or affect the duration of the former.

Continued fevers are converted into different diseases, the production of which admits one general explanation. During the encreased action of the circulating system, if any part of the body be originally weak, or have been rendered infirm and irritable by preceding disease, congestion and its consequences may be expected there. It is therefore easy to conceive, why one patient should suffer a paralytic affection, another phthisis,

or

or a third nephritis, in consequence of
ous cases of typhus. The glandular s
rations, consequent on fevers, seem to d
on the same principle, for although th
represented as critical, by the older m
writers, I have seen a striking proof
contrary. A middle-aged man had b
of typhus nearly three weeks, when a pa
eal abscess begun to form on one side
face. According to the common op
his recovery was to be expected; yet t
the abscess burst, and discharged free
patient died. The remedies directed
the general symptoms of fever, ough
therefore, to be suspended on the faith o
appearances, notwithstanding the conf
which authors would teach us to rep
them.

I have seen paralysis supervene
phus, and prove mortal before the fev
finished its course *, when it appeared
death, that extensive suppuration had

* Medical Hist. and Reflect. p. 133.

place in the brain. But, in general, the paralytic symptoms do not appear till the fever has ceased; we have then nothing to apprehend for the patient's life, but we may expect an obstinate disease. I have not often found insanity supervene to typhus, though some alienation of mind is not very uncommon, after long delirium. When maniacal symptoms take place under such circumstances, there is reason to fear that recovery will prove difficult and tedious. I have been startled by Sydenham's direction of copious bleeding in such cases, but I have met with a proof, that repeated bleeding may become necessary, in congestions of the brain, immediately after the expiration of a typhus. *J. Coverley*, a young man, was attacked by a fever, which had every character of an incipient typhus; there were, particularly, great tremors, violent pain in the head, weak pulse, and tendency to delirium. All these symptoms were removed, in a short time, by the use of bark and wine. He then had a relapse, and again recovered. He continued

feeble and emaciated, and very soon aft
retreat of the fever, was seized with ex
ating, constant head-ach, and inflammat
the left eye. As the fever had reduce
so much, I hoped to subdue these sym
by cathartics, opiates, topical bleedin
blisters. After evacuating his bowels,
were so torpid, that he required large d
calomel, I gave him Dover's powder
doses. No relief being obtained by
methods, and finding his pulse oppre
directed him to lose ten ounces of
Great relief immediately followed, a
pulse become softer and fuller.

The exanthemata are frequently co
into diseases, which become both chro
dangerous. The small-pox often p
severe coughs, diarrhæa, and ophthaln
some rare instances, tumors of the joi
pervene, which suppurate, and destr
patient *. The pneumonic inflammati
tending the measles, is too often co

* Hoffman de Variol. There is a case of t
very well described in the Miscellanea Curio

into phthisis pulmonalis. Glandular swellings, and general dropsy, frequently succeed the scarlatina anginosa.

In particular seasons, conversions to dropsy succeed most cases of typhus. It does not appear to me, that this conversion is owing to any remarkable degree of debility: possibly it may proceed from congestion in the system of the vena portarum. It happens most frequently among children. In one case of this kind, epilepsy supervened to the dropsy, and destroyed the patient. In another, the patient recovered by the application of blisters, and the internal use of stimulants, after having undergone several epileptic fits, and appearing comatose during their intervals.

There is a curious case in Dr. Percival's Essays, Medical and Experimental *, of a woman, in whom a conversion of fever took place, first into palsy, afterwards into epilepsy, and then into amaurosis. In that instance, the patient

* Vol. 1. p. 148.

patient recovered; perhaps, because some
teric commotion had exasperated the al
ing symptoms. In men, epileptic fits, oc
ring when a fever has subsisted for some
have proved fatal, as far as I have obse
Indeed when it is considered, how often
puration of the brain has been discovere
the small number of dissections of pe
dead of fever, such conversions must al
excite the greatest apprehensions for th
of the patient.

Such is the tendency to congestion, i
phus, that patients often discharge consi
ble quantities of blood, by the mouth,
bladder, or anus, without much injury
have known a person, in the second wee
a confirmed typhus, when there was
prostration of strength, delirium, and a
feeble pulse, discharge near a pint of
blood by stool, in the course of one n
with evident relief. The common the
which supposes a dissolved state of the bl
in what are called *putrid* disorders, could

have place in this instance, for none of the usual appearances of putrescency were present. These facts seem to shew, that when local inflammation attends typhus, *topical* bleeding, at least, may be very freely used.

Fevers often terminate in hysterical disorders, especially in women; men too, are sometimes hysterically inclined, upon recovering from typhus, for they experience a capricious disposition to laugh or cry, and a degree of the globus hystericus. In women, the affection is characterized by sickness and porraceous vomiting, or by convulsions*.

Nephritis is also a common conversion of continued fever: it seldom supervenes with considerable violence, excepting in persons who have formerly undergone it; but when it has been familiar to the patient, I have commonly seen a very large quantity of gravel passed, with extraordinary pain, in the state of

* Medical Hist. and Reflect. p. 119.

of conversion. The accession of n
always extinguishes the fever.

In young men, a swelling and inf
tion of one testicle sometimes takes pla
becomes the principal object of at
towards the close of continued fevers
out affecting the progress of the origi
ease. I believe suppuration seldom h
in this conversion, but the affected te
sometimes wasted. During one se
have observed a disposition in most f
terminate in inflammation of the e
nose, and lips, proceeding from one
another progressively, like erysipelas,
truly of the active kind of inflam
The eye-lids, and point of the nose
rated, in some cases.

In 1790, a remarkable conversio
pened, in many instances: typhus,
most malignant kind, terminated in
grenous affection of the pudenda,

young girls *. This conversion proved fatal, in a great majority of cases, notwithstanding the liberal exhibition of wine, bark, and opium.

I have seen typhus converted to an obstinate head-ach, which was cured by blistering behind the ears.

A. B. a middle-aged woman, was sent into our hospital as a lunatic. I found her in a state of insensibility, with a thready, low pulse, her cheeks flushed with a circumscribed red, and her tongue foul. Cordials were administered, but she could not be rouzed by any method, and she died, a few days after her admission.

Upon opening the head, the vessels on the surface of the brain appeared very turgid; the lateral ventricles were full of water. In different parts of the medullary substance of both hemispheres, tumors were found, of a middling

* Medical Hist. and Reflect. p. 133.

dling consistence, some of the size o
peas, others about the bigness of a nut
divided, marks of suppuration were fo
their internal substance. One of th
mors nearly filled up the anterior part
third ventricle; another, the largest
was enchased in the substance of th
segment of the pons varolii, which it oc
almost completely.

From the most accurate enquiry, I
not discover that this woman had shew
remarkable alienation of mind, till w
few days before I saw her. Her sym
were those of a patient dying of typh
there was nothing sufficient to give sus
of the real cause of death. She had
plained of a head-ach for several m
without interrupting her duty as a serv

Chronic diarrhæa often precedes
toms of ulceration in the bladder. Thi
perhaps be reckoned a case of sympath
the appearance of conversion is as str

as in any other instance. A discharge of flatus from the urethra, however, attends this kind of diarrhæa, and should give intimation of the latent disease.

In like manner, chronic diarrhæa and dropsy are familiarly converted to scirrhus of the liver, suppuration of the kidneys, and other organic læsions of the abdominal viscera, which are largely detailed in practical books.

Jaundice is said, by Baglivi, to be converted to tympanites*: I have seen tympanites converted to diarrhæa and ischuria. *C. W.* a man about fifty years of age, had been affected with a soft, inelastic swelling of the abdomen, a year and half before he applied to me. When I saw him, it was evidently a confirmed case of tympanites. He was at the same time asthmatic. When he swallowed a mouthful of any spirituous liquor, the swelling of the abdomen began to subside, and

* Prax. Medic. p. 375.

and in the course of five or ten minute
tirely disappeared, without any sensibl
charge of flatus: in three or four ho
rose again to its former height. A ver
lar motion of the intestines could be p
felt, by applying the hand to the abd
while the tumor subsided. The diste
was relieved by a course of steel and asa
da, with occasional opiates. About a
after he came under my care, he wa
quently troubled with a severe diar
which was soon converted into a painfu
charge of bloody urine, and sometimes
a total suppression of that evacuation.
these complaints he was relieved, by th
use of camphor and opium in conjun
but they returned frequently during th
suing half-year, and at last confined
to his bed. The ultimate conversion
appeared: his right leg and thigh swelle
inflamed with great pain, and gangren
death soon followed.

At different periods of his complaint

size of the abdomen had varied greatly. It was sometimes little more than natural, but no connection could be traced between this circumstance, and the conversions of his disorder. The singular phænomenon of the sudden decrease of the swelling, could be produced, almost to the last.

On opening the body, I was surprized to see no omentum, for the subject was very fat; on diligent search, it was found that the omentum was pushed up into a sac formed by the diaphragm, and actually lay within the thorax, on the right side; as this sac, which was large enough to contain the hand, had a very small neck, the omentum was not brought down again without force. The caput cæcum, and transverse arch of the colon were in a state of very great distention; the other parts of the intestinal canal appeared sound. The kidneys were not much enlarged, but entirely diseased: their external surface was covered with watery vesicles, under which we found deep, circular ulcers, which

which could have contained a large pea
ternally, the kidneys were inflamed and
ated, in their whole substance. The
was sound, but the gall-bladder was f
gall-stones, which, Baglivi remarks, l
ways found very numerous, in persons
of tympanites.

This dissection throws no light on th
gular fact, of the occasional removal
distention. The ischuria was perfectl
counted for; probably the diarrhæa
sympathetic affection, produced by the
of the kidneys. The hernia of the diaph
here detected, has not, I believe, bee
scribed before.

Dyspeptic complaints, of long standin
often converted to general dropsy, esp
ly when they are accompanied by ch
pain of the stomach. Ascites is frequ
converted to chronic inflammation of the
els and diarrhæa, which generally prove f

Mar

* Med. Hist. and Reflect. p. 97 and seq.

Maniacal complaints, after continuing for several years, often terminate fatally with epileptic fits, as Dr. Mead has observed. In opening several patients, who have died in this manner, I have found the lateral ventricles of the brain turgid with water, and such a general fulness of the blood-vessels of the brain, that they appeared as if artificially injected. It was difficult to determine, whether there was any unusual hardness of the brain in those cases, but all the parts appeared uncommonly distinct and sharp.

Dr. Mead has noticed two remarkable conversions, one of which extinguished, and the other retarded, a dangerous complaint. A young lady, in the last stage of a dropsy, was seized with a fit of insanity, during which she bore the action of powerful hydragogues, which removed at once her mental and bodily disease. Another lady, affected with all the symptoms of confirmed consumption, was suddenly impressed with religious melancholy, which removed every phthisical symptom

tom for three months, but the origin
ease then returned, and proved fatal *.

I have seen a patient, who had lon
in a brutal state of insanity, seized
pleurisy, and have found him more cl
consistent in his answers than usual.
have known another maniacal patient,
completely deranged, undergo a very
operation, without any immediate effe
the mind.

In one maniacal case, which succee
ill-treated typhus, the patient received
lief from medicines, till a broad,
scurfy eruption appeared about the c
his head, which was bald. Successiv
of these eruptions delivered him con
from all remains of his mental disorde

Typhus, and the cynanche mali
sometimes reciprocally converted, wh
are epidemical. The cynanche has be

* Mead de Insania.

verted to general dropsy, even before the ulcerations in the fauces disappeared.

IV. Conversions may arise, when a disease, regular in its usual course, or long familar to the habit, is violently terminated by improper methods, or suddenly extinguished by accidental citcumstances.

I have noticed elsewhere *, a remarkable case, in which epileptic fits were produced by the retrocession of the itch, in consequence of some external application. In that case, the epilepsy resisted all the usual methods, and was only cured by reproducing the itch.

Instances of the production of melancholy and madness, by the suppression of eruptions, or the healing of old ulcers, and habitual drains, are common in practical writers. The diseases originating from the suppression of the menstrual and hæmorrhoidal discharges, are also well explained in different books. Dr. Hoffman's

* Med. Hist. and Reflec. p. 183, 184.

Hoffman's treatise *de Morborum Tran*
tione, relates almost entirely to this c
disorders.

I am inclined to consider the pu
mania, as a case of conversion. Durin
tation, and after delivery, when the mi
gins to flow, the balance of the circulati
greatly disturbed, as to be liable to mu
order, from the application of any e
cause. If, therefore, cold affecting the
violent noises, want of sleep, or
thoughts, distress a puerperal patient,
the determination of blood to the br
regularly made, the impetus may be
converted to the head, and produce
hysteria, or insanity, according to its
and the nature of the occasional cause

In the following case, which fell late
der my observation, the most alarmin
versions happened, in consequence
moveable inequality of circulation.
a young man, of a full habit, after a

his right side, was affected with a cough, and occasional spitting of blood. When he came under my care, he had every appearance of phthisis, except emaciation. He sometimes passed small quantities of blood, both by stool and urine. After three or four months, the phthisical symptoms abated considerably, and he began to complain of a severe, fixed head-ach; in a short time, he became paralytic on the left side. From these symptoms he was gradually freed, by repeated bleedings and blisters. A violent pain then attacked him under the left breast, without renewing his cough, which was followed by an irregular train of complaints, that did not point to any particular disease. At length, he began to swell, round the lower part of the trunk of the body, and there was reason to believe, that a large quantity of matter was forming in the cellular membrane. Not long after, a disease in the vertebræ of the back began to shew itself. His lower limbs were now become entirely paralytic. After languishing in this state for a considerable time, he was seized with a purging of pure pus,

which continued for two days, and con
ly reduced the swelling, but left him so
that his death was hourly expected.—
not an opportunity of knowing the ev
this case.

Tedious dyspeptic cases are often co
ed to cutaneous eruptions, in distinct pi
of a fiery red colour; such eruptions
guish the complaint in the stomach.

The hernia humorrhalis, occasione
premature suppression of gonorrhæa, n
properly reckoned a case of conversi
have been informed, that this affection
testicle has been known to baffle every
of relief, and that the practitioner fo
necessary to inoculate the patient for
gonorrhæa. The return of the runnin
ardor urinæ, it was said, entirely remov
disease of the testicle.

Three remarkable cases of convers
consequence of suppressing mercurial
tions, are mentioned by Dr. Silvester,

M

Medical Observations and Inquiries *. In one, violent pains in the joints, in another, a fixed head-ach, in a third, a vomiting of every thing swallowed, during three months, took place. I have known hermoptöe and consumption follow exposure to cold, when the body was charged with mercury. The effects of mercury, in large doses, have been little known, comparatively, since the dangerous practice prevailed, of trusting the cure of lues to slight courses of that medicine. I have seen tremors, so universal, that they seemed to affect every individual muscular fibre in the body, supervene on its large, and long-continued use, when siphylis had been rooted in the habit, by a too sparing previous exhibition. In another case, I have known mercury so imprudently given, and with so little attention to the progress of the disease, that when the mercurial ulceration took place in the tonsils, it was supposed that the patient was relapsing, and a fresh load of mercury was thrown in, with the effect of producing

* Vol. 3. p, 241.

producing racking pains in the bowels,
and bloody purging.

The mercurial hectic, which may jus
reckoned a case of conversion, is no
alarming in itself, by ruining the pow
digestion, but in its tendency to pr
melancholy, and total derangement
faculties.

De Castro mentions a conversion
dropsy to epilepsy, of which I have s
instance, but which is confirmed by a
Lieutaud's *. The ventricles of the
are often loaded with water in hydrop
tients, at every age. In fatal cases of
ria, when the patient dies comatose, it
known that the ventricles of the brain a
ed with a fluid, which has the sensible
ties of urine. This is a real convers
apoplexy.

I shall remark, by the way, that in di
pa

* De Hydrop. Epigen.

patients, the pathological rule respecting the conversions of determination between the skin and the kidneys, does not always hold good. In two cases of diabetes, the patients have complained of profuse sweats, at a time when the discharge of urine was most considerable.

In the cases which I have seen, dyspeptic symptoms have always preceded this disorder, and it has been attended with great emaciation, and every appearance of general debility. Dr. Sydenham seems to have regarded it, as always dependant on such a state *.

The diseases produced by the improper suppression of gout, whether from the imprudent use of tonics, such as the *Portland Powder*, or from too sudden an adoption of low diet, are too well known to require particular consideration here. While gouty symptoms are so directly produced by a certain state of the passions, it is vain to direct our attention to corporeal remedies only; and it happens

* Epidemic Diseases from 1675 to 1680.

pens unfortunately, that an exemption
care and solicitude, the great sour
arthritic complaints, is, in this life, una
ble. Under uneasy circumstances of
gout will arise in persons strictly tem
and virtuous, active, free from here
pre-disposition, and in every respect qu
to claim an exemption, from this great so
of anxious refinement, and artificial soc

Anomalous cases of conversion m
multiplied infinitely, not only by the c
nation of the different circumstances a
mentioned, but by the modes of trea
adopted by practitioners. Slight ca
synochus are often converted to typhu
termittents to continued fevers, and
monic inflammation to phthisis, by th
proper practice of medical men. O
delicate subject, Dr. Hoffman has wri
little essay, entitled, *Medici Morborum*
which may be perused with advantage.

There are few diseases, in which the e

judicious practice are more apparent, or distressing, than in rheumatism. I have ıtedly seen the patient's strength worn out, ıshing contrary methods to excess, when ɔractitioner has shed torrents of blood day, and has endeavoured to repair the equent sinking, by pouring in the most ıievous cordials on the next; while the instead of abating, has become more ızing. I have seen the plan of bleeding low diet carried on, till the patient be- dropsical, without obtaining any relief pain; in other cases, I have known the fixed for life, by an untimely exhi- n of bark. I have known extenuation e whole body, and palsy of the extrem- supervene to a common rheumatic at- which might have been readily over- by proper treatment. These conver- are particularly frequent among the , in remote parts of the country. In cases of great emaciation, and loss of ntary motion, combined with constant , nothing answers better than a course of ling-

ling-liver oil, which has long been a pop
remedy in our infirmary. I am incline
think, that this remedy operates, in a
measure, by encreasing the deposition o
in the cellular membrane, for I have in
ably observed that it is slow in relieving
patients acquire a considerable degre
corpulence as their recovery proceeds
that an encrease of plumpness is alway
dent, before the pains diminish remarka

The lives of many hysterical and
chondriacal patients have been at once
ened and embittered, by the thoughtle
couragement, which some practitioners g
the use of spirituous liquors. I have see
melancholy instances, in which habits of
drinking have been thus acquired, und
sanction of the medical attendant, by pe
not only temperate, but originally delic
their moral habits. In this manner, h
cal disorders of no great moment, are
verted to scirrhus of the liver and d
to apoplexy, palsy, and other fatal dise

ave known a chlorotic palpitation of eart treated as a dilatation, though the of the heart was found to strike in the place; frequent small bleedings and iet were enjoined, and this method was ed till anasarca supervened, and the pa- strength was completely exhausted. *lanum de tabulâ.*

cases of internal suppuration, the re- l of pus from one cavity to another, from nee-joint, for instance, to the cavity of eritoneum, is popularly called a metas- and described in every treatise of gen- urgery.

the Miscellanea Curiosa, a case is re- in which epilepsy was cured by con- on to a quartan *.

nversions of the different species of in- nation into each other (a neglected sub- of great importance) belong, perhaps, to this

* Ann. 1695-6. p. 34.

this head, as there seems little regular
the process. I have found active inflam
tion in the tonsils combined with the sca
na anginosa, in several cases: when ul
tion had begun on the surface of the t
after the appearance of the scarlet eff
cence, the body of the tonsil has inflame
swelled, the ulcerative process has been
ped; genuine inflammation has appe
and suppuration has followed. The
have sometimes been extinguished by
occurrence; sometimes they proceeded,
the suppuration of the other part of the
had run its course.

Diseases produced by independent c
when they coincide in the same pa
although they are not mutually conve
may yet influence each other in some d
so that the accession of one may be reta
Thus, when the contagions of the measl
small-pox have been applied about the
time, to a person predisposed, the disea
communicated has run its course, and

cond disease has taken place, though at
r period than that in which its contagion
y takes effect. There are other conta-
diseases which may subsist together, with-
ffecting each other in any respect. It
ever been observed, in armies, that the
nce of the venereal disease prevent-
tacks of dysentery; and it is known
ydrophobia, which so powerfully agi-
every fibre of the system, has not pro-
l any alteration in a virulent gonorr-
with which an unhappy sufferer was at
me time affected.

ase lately occurred to me, however, in
nodes on the shin-bones, and venereal
in the heels came on, immediately after
of acute rheumatism, in consequence of
contracted several months before.

ere are some cases in which two diseases
st together, without any apparent con-
on, although one of them be really
uced by the other; and from a want of
facts

facts upon this subject, the relation can be traced by dissection after death. I give a case of this kind, at some lengt cause the symptoms were of the most de kind, and calculated to inspire false noti the disorder. If it be properly consi it will be found to convey very imp cautions.

S. S. a boy, three years of age, was with a fever, then epidemic, on the 1 Sept. 1794. I saw him three weeks wards. With the common febrile sym he had a considerable degree of an which affected more especially his fac lower extremities. He had no cou difficulty of breathing, nor pain in his and I could not find, from the most enquiry, that he had ever made such plaints. There was great paleness ov whole skin. He was torpid, without um, or the symptoms of oppression co in typhus. About the eleventh of O he complained of pain in the lower

abdomen; on the twelfth, violent palpi-
ns of the heart, and in the arteries on the
, supervened, and he died on the thir-
th.

pon opening the body, we found water
ed under the dura mater, and the pia
r was distended with water. The blood-
els of the brain appeared full, but there
no other morbid appearance in the head.
the abdomen, the liver was unusually
, but otherwise sound; the gall-bladder
much distended; the kidneys were en-
d, but not diseased; and there was rather
fluid than usual in the cavity of the peri-
um. In the thorax, there was great disease.
pleura adhered strongly to the ribs, all
d, and on the right side was inseparably
ed to the part covering the lungs. There
an inflammatory exsudation over the
le surface of the pleura. A small quan-
of fluid was effused, on the left side.
pericardium was filled with water. The
t was sound, but the left auricle was
very

very small, and shrivelled. The righ
cle was somewhat larger than usual.

In this case, an active inflammation t
the whole extent of the pleura, pro
exsudation and adhesions, was not in
by any symptom, during the continua
the complaint. The anasarca mig
originally produced, by the remote ca
the fever and pneumonic inflammati
it was apparently encreased, at least, a
ported by the obstacles to circulation
the state of the lungs and pleura pre
particularly after the formation of th
sions. Both parents assured me, t
anasarca appeared at the same time w
fever. This affords, therefore, a s
example of those insidious cases, in
the principal disease does not prod
proper symptoms, but proceeds under t
of another disorder, not usually connect
it during its active state. A succes
blisters would be a probable method of
ing such affections, and might be use
ad

ntage when the fever languishes, like (without pointing to any particular cause rotraction) even in lower degrees of in- nation. Indeed, the conjunction of so ral an anasarca, with any fever which does appear an exquisite typhus, in the first must give suspicion of partial plethora, ongestion, in some part of the system, excite attention to the slightest inflam- ry symptom. The palpitations of the , which only supervened within the last lays, were probably owing to the firm sion of the pleura lining the ribs, to that ring the right lobe of the lungs, which ded both circulation and respiration, and e encreasing effusion of fluid into the ardium.

ne pain in the abdomen, which I have remarked in dilatations, and inflamma- affections of the heart, was present here, vas not so violent, nor of such duration, afford suspicion of disease in the tho-

In

In every case of fever, attended w
usual appearances, the practitioner ou
be aware, that the symptoms whicl
themselves on his attention, do not
form the whole, nor the most formidal
of the disease: he must, under such
stances, keep the remotest causes and
quences in view, and rather risk so
officious, such as the application of
when no local pain, or injury of fu
seems to demand them, than suffer the
to be destroyed, without making an e
his preservation.

As there was no vomiting, in this
do not think it could be properly r
peripneumonia notha, conjoined with
But this fact, with many others, whi
unnecessary to mention here, proves
lungs, as well as the heart and liver, n
fer irremediably, from lingering, im
tible, yet destructive inflammation *.

* A very similar case is to be found in
Obs. 384. Juvenis duodetriginta annorum

om these facts, many important conclu-
may be drawn, respecting the prognos-
nd cure of diseases. The subject is ca-
of admitting very extensive research,
onsidering this paper as a slight sketch
indicating what may be done by other
vers, I shall content myself with some
e most obvious deductions.

Whenever local inflammation super-
to an acute disease, it shortens or ex-
ishes the original disorder. Hence one
source of perplexity, in such cases as
f *S. S.* (p. 60) where the inflammation
not betray itself by its proper symptoms,
ne feverish symptoms cease, or at least
reatly mitigated by the conversion.

a laborans, inter remedia huic morbo dicata,
ina morte tollitur.
rax sinister pure repletus invenitur, nullis
manentibus pulmonis reliquiis Non tussie-
ger, in utrumque latus decumbebat: nullum,
rbo, fuerat morbi pectoris indicium, quod sane
subit.

Histor. Anat. Med. tom. 1. p. 534.

An important rule in practice n
formed, from this observation. In
alarming cases, where pneumatic inf
tion supervenes to synochus, or typh
cure of the fever may be in a great n
trusted to the supervening disease, a
attention may be chiefly directed to t
gress of the inflammation. By this
contra-indications will be avoided, a
safety of the patient will be better co
than by the temporizing practice
adopted on such occasions. The dan
salubrity of this conversion, appears
pend greatly on the nature of the p
tacked by inflammation. If it be a
bate, or conglomerate gland, the feve
ten*, though not constantly, extin
without hazard; but if the brain, the
or peritoneum are inflamed, whatev
comes of the fever, the importance o

* It will appear, from the case mentioned
that the existence of an external inflammatio
not induce practitioners to neglect the fe
deed, no perplexity, nor contra-indicatio
arise from it.

s to life, renders the progress of inflam-
on in them highly dangerous.

is easy to explain from hence, why in
nts, who die in typhus, of suppuration in
rain, the fever often seems at a stand, for
e days before death; at least the patient,
n incautious observer, appears not mate-
y worse. The original fever is mitigated,
roportion to the advance of a fatal in-
mation. In like manner, the encreased
gy of the brain, produced in mania, re-
s, or cures dropsy, and other diseases,
nding on a want of action in the system.

his deduction serves also to explain the
n of blisters, which, by producing local
mmation, imitate the process, and in pro-
ion to their action, exhibit the effect, of
kind of conversion.

ence also, the salubrity of the gouty in-
mation, when it seizes a part not neces-
to life. This differs from other kinds
of

of inflammation, in its power of extingu
chronic diseases, such as dyspepsia, or r
tis of long standing. May we conclud
this circumstance, that attempts to exc
flammation in chronic disorders, eit
blisters, or rubefacients, ought to be
frequently made, and more varied, t
usual in the present practice?

It must be added, that general fever
times cures local inflammation; Mr.
TER says, he has seen a gonorrhœa
guished, by the accession of a fever.
facts of this sort appear to have imp
the mind of that excellent observer,
have given him a confused idea of the
ence of conversion. But his theory
incompatibility of similar morbid acti
the living body, amounts to nothing
than a recital of facts, in abstract ter
is too common, for modern philosop
mistake such recitals, for the investiga
causes. When we consider, that, besi
facts respecting general fever, there ar
unex

spected and dangerous conversions, in class of exanthemata, from the eruptions, they have been completed, to inflamma- of the internal parts: that in erysipelas, are not yet acquainted with all the cir- stances, under which inflammation is lated from the skin to the brain; and the translation of pus from its original to a distant part of the body, is not yet ced to any rules, from which we may to expect it; we perceive, at once, a deficiency in medical science, and a of enquiry, equally curious and useful.

he histories of several chronic diseases, bsolutely cases of conversion: to be con- ed of this, we need only to refer to SYD- AM's descriptions of hysteria and gout. numerous tribe of disorders, occasioned terations in the structure of the abdomin- scera, exhibit similar phænomena. Scirr- obstructions of the mesenteric glands present the appearance of colic, or dys- ia, while scirrhus of the liver is masked under

under symptoms of jaundice or d
When we find so many acute disease
vertible into each other, it seems n
possible, that by investigating their c
tions in this respect, an unity of cau
be discovered, among affections, wh
present, appear essentially different, ar
new light may be thus thrown, on th
obscure doctrines of pathology.

2. The convulsion denominated hys
when it seizes the muscular fibre, in c
conversion, is always salutary, and n
regarded, in many instances, as the c
chronic diseases. There is great sir
in the effects of *electricity*, excepting
action is momentary; and when it
sidered, that the movements which
duces, in paralytic limbs, are truly c
sive, it seems not improbable, that its
tages arise, from its exciting a transitor
of that nature. The more permanent
of internal stimulants and tonics, may b
posed to excite the convulsive effor

l lower degree, which may be illustrated, considering the effects of arsenic, in dif-ent doses: a few grains of that mineral, are able of producing the most fatal convul-ns; the sixteenth part of a grain, repeated proper intervals, operates as a safe and eficial tonic.

The accession of epilepsy, it is said, has ed an intermittent of long standing; the e effect has resulted from the cold bath, ch gives a strong, momentary shock to the in. Convulsive movements appear to be st useful, by destroying morbid actions, ch have been perpetuated by habit. Hence utility of cold bathing, in lingering cases typhus, where the usual stimulants have their effects. In inflammatory diseases, accession of convulsions, or spasm, is mmonly dangerous; as in the inflammation the gums, and symptomatic fever, attend-dentition; indeed, the conversion of a ng irritation, from any part of the system the brain, is always hazardous. This is evident

evident from the consequences of conve
of inflammation, from the lungs to the
in pneumonic cases, or from the skin
head, in erysipelas, and in many instan
retroceding, or misplaced gout. Consi
under this point of view, the analogy be
the effect of these conversions, and th
tonic and stimulant remedies, in like ci
stances, becomes very striking and in
tive. It must be observed, that no go
fect is derived, from the accession
stronger, or more general convulsio
spasm, to one weaker, or more parti
when epilepsy succeeds to chorea, or t
to trismus. But to all these cases, the
terical convulsion must be understood to
an exception; for I apprehend, we ar
yet sufficiently acquainted with its infl
on the progress of diseases, to set any
to its action.

3. It is so far certain, that med
operate by producing conversions, tha
perceive very considerable diseases resu

the use of certain remedies, such as
ury; and we judge of the extinction of
riginal complaint, in some measure, by
ncrease and permanency of the remedial
se. I have mentioned a case (p. 51) in
h the mercurial ulceration of the tonsils
so great, that a practitioner mistook it
r the venereal ulcer; and Mr. Hunter
iven several cases, where the mercurial
ation had out-lasted every symptom of
and proved an intractable complaint.
ke manner, Dr. Darwin has observed, in
ZOONOMIA, that some derangements of
l cannot be removed, without exciting an
cial delirium, by means of opiates.

When we give diuretics, or cathartics, in
sy, we endeavour to excite a disease in
ntestines, or kidneys; for an extreme
ase of natural action, in any part, is
inly morbid. A conversion of ascites to
hæa, and to chronic inflammation of the
tines, is, in reality, a common occur-
e, and almost always fatal. We should
learn

learn from this fact, to avoid the use of
tating purgatives, or at least not to e
them familiarly, in cases of ascites.

To ascertain the diseases, produced
long use of particular remedies, would
object of considerable utility. We
already, the mercurial hectic, the dys
arising from the too familiar employm
tonics, the apoplexy, produced by the i
dent use of cold-bathing, and the pl
occasioned, under particular circums
by the use of warm mineral springs.
possess these, only as detached facts,
which no general conclusions can be fo
and since the mischievous prejudices
bark and opium have been explode
have, perhaps, erred on the contrary si
supposing the general action of medici
be salutary in itself, and consequent
neglecting to investigate their ultimate
on the constitution.

4. It may be regarded as a general

internal inflammation, supervening to
onic diseases, while it is equally dangerous
a similar conversion of acute disorders,
less tendency to extinguish the original
plaint. Thus, inflammation of the peri-
lium, is frequently discovered, in dissec-
s of persons who die of general dropsy *,
f other chronic complaints, in which the
ction of the pericardium seems to be a
ual conversion, which, indeed, hastens
h, but does not arise from any necessary
nection with the original complaint, or
its usual conversion. Thus, pneumonic
ammation, supervening to intermittents,
s its course without extinguishing, or
nging the type of the fever †.

have already noticed the conversion of
psy, to inflammation of the bowels: chro-
inflammation of the liver seems, also, to
form

* Lieutaud Hist. Anat. Med. t. II. p. 19, 72, 73, 75. obs. 469, 470, 695, 696, 697, 698, 699, 700, See also the whole sections, p. 66, 67.

† Bonet. Sepulch. p. 1428.

form the termination of some lingerin
peptic complaints, but the train of sym
from which it may be expected, is n
ascertained.

Even the gouty inflammation, wh
seizes an internal part, loses its salutar
dency, and assumes the most dangerous
consistent with the symptoms proper
flammatory affections of the particular
attacked, without pointing to any cu
conversion.

5. Cutaneous eruptions often exti
dangerous diseases. Excepting the r
exanthemata, such conversions seldom
pen in acute disorders; I have known
rheumatism accompanied, in two case
efflorescences on the legs, but they seem
have no effect on the pains. Madne
melancholy, epilepsy, delirium, prot
after fever, dyspepsia, various pulmona
fections, are all observed to be mitigat
removed, on the appearance of cuta
diso

ders; especially on the return of those, h, after becoming familiar, had been sud- suppressed.

electrifying patients for obstinate cases lsy, I have often remarked, that the pa- received no benefit, till red, fiery erup- were produced, on those parts of the which were surrounded by the chain.

me practitioners have imagined, that could be done, by producing crops of les on the surface by stimulant applica- in diseases of the lungs and the joints, xperience of this method furnishes no of its efficacy.

rhaps, as I have suggested elsewhere, a fic eruption is requisite, in such cases, frequently than we are aware.

general, there is no safer conversion that to the skin; the distance of the af- d part from those necessary to life; the varieties

varieties in the state of circulation, to
it is habituated, and the easy applica
external remedies which it admits, c
for the security of the patient, when
disease is fully translated to the skin.
den conversions from the skin to the i
parts, are, I believe, universally dan
whether they interrupt the course of a
or a chronic disease.

Some affections of the skin, thou
happen in consequence of acute d
seem to have no effect on the origin
plaint; such are, petechiæ in typhus.

In the second case, published in th
cal Histories and Reflections, there is a
instance of connection between an ery
tous state of the skin, and convulsi
tended with racking pain in the stoma

6. Respecting hæmorrhages, I hav
ing to add to the observations of
writers; for abundant pains have be

ved on conversions, arising from inequal-
of circulation. It may be proper to re-
t, that the presence or absence of the hys-
cal effort, materially affects the prognosis,
ll cases of hæmorrhage.

Old men not unfrequently die, after dis-
rging blood from the urethra, for some
s. This appears to happen from ulcera-
n, or other disease, in the kidneys *.

7. As it appears, that many conversions are
ocesses, instituted by nature for the cure
diseases, and that some of the most active
nedies operate in a similar manner, we
y not only improve the history of diseases,
t the practice of medicine, by paying closer
ention to the connection, and operation of
orders upon each other. With this view
the subject, the most complicated cases
ll admit an instructive developement, and
ery additional fact may find an useful
ace.

In

* Lieutaud, Hist. Med. Anatom. t. 1. p. 249 and 258.

In pursuing this train of observatio
may be confident, that we are really f
ing the order of nature, and that the
will be, not an arbitrary system, but an
sion of solid, and applicable know
Thus a foundation may be laid, for a
arrangement of diseases, and a just the
the sanative motions of the human s
splendid objects for the ambition of a
age, to which we can only hope to con
a few materials!

Thus a check may be given, also,
unprofitable custom of publishing singl
which, some rare instances excepted,
little more public utility, than the mor
of a monthly magazine.

The accession of epilepsy to dropsy, noti
35, was inserted on the occurrence of the ca
this essay was ready for the press. This
plain a seeming contradiction in p. 52, whic
neglected to alter.

OF INSANITY.

Vestibulum ante ipsum,
Luctus et ultrices posuere cubilia curæ.

OF INSANITY.

here are few subjects on which informa-
is more ardently desired, or more diffi-
to be communicated, than this of insani-
The philosophical consideration of the
es and symptoms of this disease, involves
most intricate operations of intellect, and
ideas of them obtained by the most patient
laborious attention, require talents far be-
d the usual standard of merit, for their
ression. Those who would gain a know-
e of the symptoms of madness from
ks, more particular than that afforded by
ETÆUS, must consult SHAKESPEAR and
HARDSON; as the Greek physician learn-
the signs of love from the verses of SAP-
. From a want of that exquisite dis-
cernment

cernment in the traces of character rather qualifies a man for the compos poetry or romance, than for patholog cussion, some medical writers have their arrangement of mental disord narrowly, while others have extended pire of insanity to so many transit cesses of passion, as to share with DA PUS in the ridicule of supporting stoical paradox.

Before a comprehensive view of th ject can be obtained, it will be necess those who are accustomed to see insa sons, to communicate the result of the servations simply, according to the imp they receive, without referring to a or hoping for one. To this must be frequent inspections of the dead, whic tinually present so many unexpected a ances, and render our views in prog at once extensive and cautious. I pr to mention a very few detached facts, in formity to this plan.

In maniacal cases, false perception, and onsequently confusion of ideas, is always a ading circumstance; as far as I could ever arn from maniacs, surrounding objects ap- ar to them to be on fire, at the beginning their disorder; and like wild animals, they e sometimes disagreeably affected by par- ular colours, which excite their indigna- on to a violent degree. In consequence of ese sensations, added to their own hurry d confusion of thought, they are by turns nid and outrageous. When a lunatic at- npts to strike, it is generally by surprise, when he expects no resistance; a deter- ined opposition disarms him:

"Man but a rush against Othello's breast
"And he retires."—

The confusion of thought may be traced all its degrees, in different cases, from a nt of the common power of concluding, to inability of completing a single sentence. many maniacal cases, the disease seems to nsist in incitation, and, as it were, inflam- mation

mation of thought, so that the mind is r
lowed leisure to form any judgment cor
ing the ideas presented. A similar st
the faculties is experienced, on the' m
succeeding a debauch in wine. In
cases, every past idea is recollected
great accuracy, and the patient repeat
trains of occurrences, or of arguments,
in soliloquy, or in reply to something s
the attendants. I have often witnessed
ishing exertions of memory, carried on
manner, for several hours without int
tion. There appears, in such cases
more incoherence than would be fou
the discourse of a rational person, if h
to utter all his ideas aloud, without res

There are inferior degrees of ma
which the patient preserves a strong
mand over himself, though disposed
violence against individuals. I have
maniac, after committing a single o
master himself so completely, that no s
his disorder could be detected duri

onths confinement; but from the moment
at a sally of passion threw him off his guard,
e became furious and ungovernable.

Even in the frantic state, attention and
emory are not always abolished: a furious
aniac will sometimes throw out a smart re-
rt upon those who address him, which
roves that he knows his own situation, and
at of his attendants.

The obstinacy of false perception, once
mitted, is incorrigible. A maniac, con-
ed in a house situated on a small brook,
ncied himself the owner of several vessels
hich were daily expected in port. Though
e saw patients, who were allowed more lib-
ty, step over the brook many times in the
ay, he always rose when the moon shone, to
e whether his ships had entered the river.
pon similar occasions, persons unaccustom-
d to lunacies, expect to do some service, by
ying to convince them of their error; but
e attempt is always unavailing; the patient
will

will even admit some distinction, yet ne
his favourite idea. A gentleman now
my care, believes himself to be of roy
traction; when I accost him by nam
says, that to his physician he is indeed
—, but to all others he is the prince
of Spain, and from them he expects the
monies due to his birth.

When lunatics attempt to write, ther
perpetual recurrence of one or two fav
ideas, intermixed with phrases which c
scarcely any meaning, either separately,
connection with the other parts. It
be a hard task for a man of common u
standing, to put such rhapsodies into an
telligible form, yet patients will run
ideas in the very same track for many
together.

If the violence of any passion has
among the immediate causes of insanity
passion is brought into action with great
at some period of the disease, and pride

, or love, becomes a distinguishing feature.
r produces an immediate expression of the
ngest kind, deprives the maniac of speech,
renders his countenance a hideous cari-
ure.

The contrary state to false perception, is
ntensity of idea, which constitutes melan-
ly. The maniac, as Mr. Locke has ob-
ved, reasons justly, though from false prem-
, being deceived in his first impressions:
melancholic, on the contrary, perceives,
wrongly, but too intensely regarding some
ects, which induces him to grant them an
lusive attention, and leads him to reason
roperly, even concerning his truest per-
ions.

A melancholy patient, despairing of his
umstances without foundation, was per-
ded with much difficulty to draw up a
t statement of his affairs, which he did
great accuracy. He placed his debts in
column, and his property in another, op-
posite,

posite. But no arguments nor i
could prevail upon him to compare
umns, by which it would have appea
he was master of a considerable sum;
tention was wholly occupied with th
his debts, and he obstinately averted
from the other column.

There is a case in which melancho
pear to have false perceptions, but I
resolvable into intensity. This is wh
patients accuse themselves of murd
some other enormous crime, which th
not committed. This may happen
ways: e. Many cases of insanity com
mixture of mania and melancholy, i
commencement; in this state of the
visions are common, which are refer
the prevalent ideas in the patient's min
are remembered as real occurrences,
pure melancholy has predominated. s
in cases purely melancholic, the patien
mistake a dream for a real event.

Melanc

Melancholics are always apt to impute
ir uneasy feelings, especially those arising
n flatulence, to demoniacal action, and
y will form the most extravagant suppo-
ons, to account for the entrance of the
non into their bowels. Upon this subject
s vain to reason, and whoever attempts to
cule the patient, loses his confidence en-
ly.

One of the most unhappy states of melan-
ly, is that in which the patient suspects an
ention to poison him. With this impres-
n, he obstinately refuses every kind of
rishment, and, unless managed by skilful
ndants, dies of famine. I once saw a pa-
t who had passed a fortnight without food,
who died of mere inanition: he resisted,
the last, every attempt to force a little
e into his mouth.

have very generally found congestion in
brain, and effusions of water into the
tricles, on examining the heads of melan-
cholics

cholics after death: I have never be
to trace any connection between the sy
of the disease, and the appearances on
tion, excepting in the cases I have me
elsewhere, of conversions to epilepsy
maniacal disorders of long standing.

When a maniacal fit is going off,
pearance of stupidity and heaviness is
a favourable symptom: the length
lucid interval is generally proportio
the degree of this appearance.

All degrees of insanity which affe
temper more than the understanding, a
stinate, as far as I have observed; and a
often happen in persons who seem oth
perfectly healthy, there is a total want o
cations in such cases. There is, howe
incurable sort of insanity, in which t
tient, with great good-nature, is consta
the watch for an opportunity of telling
hoods. This is commonly a mixture
nia and melancholy. A lunatic of t

es himself the hero of every subject that nces to be mentioned in his hearing:

——— " Dives,
iber, honoratus, pulcher, Rex denique regum."

Maniacal disorders are commonly exasper- l in women, about the period of menstru- n; in recent cases, a mitigation of the oxysm, or even a complete intermission be expected to follow the period, but in onic cases no effect is to be derived from incident, expecting a slight exacerbation he disease, from the agitation of the men- al effort. When a lucid interval does pen, immediately after the period of men- ation, it seldom continues longer than a w days.

The most general causes of insanity which ave had occasion to notice, are hard nking, accompanied with watching; pride; appointment; the anguish arising from umny; sudden terror; false opinions re- cting religion; and anxiety in trade. These operate

operate chiefly on men.—From the pe
situation of the other sex, their min
sometimes deranged by the restraint o
direction of passions, which were besto
constitute their happiness.

Many cases of conversion produce in
this disorder supervenes on the imp
suppression of eruptions; on the exti
of continued fevers, or of pneumon
flammation; on the extension of scr
to the glandular parts of the brain; a
the irregularities of circulation produ
the puerperal state. Lieutaud ment
woman, who was affected with mania, i
sequence of a suppression of the me
her fiftieth year. She continued insan
ing seven years, and was restored
senses by an uterine hæmorrhage *.

In recent cases of mania, there is
monly much disorder in the functions
stomach; vomiting, therefore, is usual

* Hist. Anat. Med. tom. 1. p. 320. obs.

d, and it not only relieves the patient
a temporary cause of irritation, by clear-
he first passages, but sometimes pro-
a favourable change in the mental dis-

P. a young woman, came under my
Sept. 5th, 1792; she was in a state of
s agitation, and her ideas were totally
ed. She could not be brought to at-
to any object, and it was impossible to
n an answer from her to any question.
ered her a vomit of tartar emetic, in the
manner, which operated briskly, and
n instantaneous effect in restoring a de-
of rationality. On the 10th (five days
, the report was, "continues rational."
was discharged cured, soon afterwards.
a degree of success must not often be
ted from this remedy.

netics are sometimes useful, in diverting
nts from capricious resolutions. An el-
gentleman, in a state of melancholy, de-
termined

termined to retain his urine, and pers
in his resolution during three days a
nights, though evidently with great pa
difficulty. I ordered some doses of
tartar to be mixed with his food, w
took with some caution; copious v
was excited, and at the same time he
voluntarily with a large quantity of
the sudden stimulus given to the di
bladder, by the action of vomiting,
too strong for his resolution. This
did not return upon him afterwards.

The repetition of vomits, and the
antimonial preparations, in nauseating
are certainly proper in maniacal cas
uneasy sensations which they excite,
recal the patient's attention to a regul
But in melancholies, the addition o
depressing ideas would only encre
disease, by furnishing an opportun
some new fancies; melancholy madm
ing, as I have already observed, gre
orists. Though a single emetic may
si

able service, therefore, in such cases, it
t not to be repeated without a manifest
ation *.

maniacs, who are young and plethoric,
e eyes are turgid or inflamed, who
he night without sleep, and whose pulse
ick and full, general blood-letting ought
ecede the use of emetics. A lady of a
habit, who was seized with maniacal
toms after a slight fit of cholera, was re-
d to her senses by a single, copious
ing. But the repetition of this remedy
e and difficult, as it is seldom capable of
ving the disease, without the conjunc-
of other methods, and as an extraordi-
loss of blood may precipitate the patient
an irrecoverable state. I have seen
ics bled till they became melancholy,
nelancholics, by repeated venæsection,

ince the former sheet was printed, the girl,
oned in p. 95, has again been put under my
n a state of furious mania, and has again been
by exhibiting emetic tartar, first in vomiting,
ards in nauseating doses.

reduced to despair. It is only in
evident congestion, with an apoplecti
dency, that the repetition of bleeding
reckoned admissible. I have, indeed
known maniacal paroxysms removed
single bleeding, but they were both
cases, and in one a relapse soon follow
the other, there was a conversion to
and afterwards to apoplexy. There
ways reason to suppose congestion in
after fevers; but when congestion h
in habits much reduced by the p
disease, general evacuations must b
cautiously employed. Those facts
I have mentioned elsewhere, relating
occurrence of spontaneous hæmorrh
cases of typhus*, seem to admit a
latitude in this respect, than has hither
permitted. Some practitioners prefer
ing in the neck, in this disorder, but
not been able to discover, that it is m
fectual than bleeding in the arm.

Pur

* On the Conversion of Diseases, p.

urgatives are undoubtedly useful in most
s of insanity; but only when moderately
n. I have used the celebrated melampo-
n in a great number of cases, so as to purge
patient gently, twice or thrice a week: I
found no reason to believe that it ope-
otherwise than as a cathartic. For a con-
able time past, I have preferred calomel,
as a safe and easy purgative, and as con-
able hopes have been excited, of benefit to
erived from its proper action as a mercu-
preparation. I shall give here the result of
observations respecting this remedy, in
h, I confess, I have been much disappoint-
Farther experience, and a nicer discrim-
on of the scrophulous causes of insanity,
ist which nothing can be hoped from
cury, must fix our opinion decisively re-
ting this method of treatment.

J. J. a young man, of a full habit and
d complection, after receiving some
my religious impressions, fell into a fret-
discontented state, and in the course of a
few

few weeks became maniacal, with a n
of melancholy. When I saw him, h
were inflamed and looked wildly; h
restless, querulous, and irascible. Bl
vomiting with emetic tartar, and pur
were used without effect. He was th
upon a course of calomel, which was
ued till his mouth became very sore,
any abatement of the maniacal affectio

2. Mrs. *T.* a married woman, of
age, became melancholy without any s
cause. She talked incoherently, was
and frequently wept. Not long befor
her, she had made an attempt upon h
She took calomel, with opium, from t
of June to the 5th of July, when, her
being very sore, the mercury was disc
ed, and the opium was given alone.
bark was afterwards thrown in: und
course, she became rather more con
but no benefit was obtained, proportio
the activity of the remedies.

An elderly gentleman, who has been for
l years in a state of amentia, has twice
affected with a considerable herpetic
on on the neck and shoulders, for
calomel was administered in the form
ummer's pill. His mouth was made
ore, each time, and the eruptions were
ed, but no effect was produced on the
f his mind.

Mrs. *J.* a married woman, about the
forty, was affected with a mixture of
and melancholy. About the com-
ement of the mental disorder, her skin
e diseased, and was covered, when I
er, with a furfuraceous eruption. To
e this cutaneous affection, appeared a
al indication. She was put upon a
of Plummer's pill, and her mouth was
sore, but no relief was obtained.

Mr. *T. P.* a maniac, not furious, but
troublesome, false perceptions, among
remedies, was ordered a course of cal-
omel

omel with opium. His mouth was affected after some time, when finding no benefit from the medicine, I omitted it.

This remedy was tried in several other cases, of which my notes are incomplete, with equal ill success. It is proper, however, that I should mention two instances, where, if the calomel alone did not cure, it must be allowed to have assisted in restoring health.

6. *J. B.* about twenty-six years of age, had been for some time in a state of furious mania, when I saw him. He took vomiting doses of tartar emetic, and afterwards, two grains of solid opium at bed-time, which was gradually encreased to seven grains, twice a-day, without any sensible advantage. The opium was given, nearly during *two months*, and he took fourteen grains a-day, upwards of a week. Finding it of no use, after so full a trial, I omitted it, and ordered him to go thrice a week into the warm bath, to remain there a full half hour each time, and

to

to take three grains of calomel every night, at bed-time. During this course, his fury abated, and he became brutal and stupid. His mouth was pretty severely affected, during several weeks. The mercury was continued or omitted, according to the state of his gums, and at the end of five months he was completely cured.

In this patient, there was great obduracy of natural temper, and insensibility to remedies. It was therefore necessary to institute a tedious mercurial course, in order to produce the desired effect. I believe the long immersion in the warm bath must be allowed to have operated, both by calming his fury, and by disposing the system to favour the mercurial action.

7. A lady of a domestic, industrious disposition, fell by degrees into a maniacal state, which discovered itself chiefly by an uncommon levity in her conversation and behaviour. She could recollect, but never totally restrain

restrain herself; was noisy, familiar, and
stantly disposed to run and jump
Her perceptions were quick, and I cou
discover that they were, in any ins
false: so far the case was very singular
had a considerable tumor, on accou
which there was a necessity for her su
ting to a painful operation, of some l
soon after she came under my care.
consented to the proposal, bore the ope
with great firmness, and recovered fr
without a single bad symptom: in
thing relating to it, she perfectly under
her own situation. But when the
was healed, her mental disorder did n
pear to be abated. As she was now
health, I put her on a mercurial cours
I found that small doses of mercury op
with her as strong cathartics. Her hab
so full, that I saw no inconvenience
throwing in the medicine, so as to sup
loose state of the bowels; it was the
continued for nearly three weeks. The
al dose of calomel, during the latter p

time, was only half a grain, and her
h, as may be supposed, never became
After the calomel was given up, a
taneous diarrhæa came on, which seemed
lieve the mental affection. She took
grains of opium every night, but I was
anxious to check the discharge, as her
became more composed during its con-
nce. The diarrhœa gradually ceased,
she remained free from every maniacal
tom after its disappearance. The spon-
us diarrhœa, I conceive to have been
fort of the constitution, in one word, a
ersion, by means of which the affection
e brain was extinguished. It is proba-
hat the purging excited by the mercurial
se, might in some measure determine the
e of the effort, and turn that force to
nternal surface of the intestines, which
t otherwise have been exerted on the
orrhoidal, or uterine vessels. So far this
seems to encourage the practice of brisk
ing in maniacs. But few instances oc-
in which the patient's robust, and even
luxuriant

luxuriant health, and undisturbed
functions, will equally justify the
this method to any great extent.

Upon the whole, I think calomel
to be farther tried in cases of insani
some recent instances of mania,
used emetic tartar in nauseating and
ing doses, and have immediately follo
the exhibition of that remedy with sm
of calomel, till the gums have becom
ed: I have then given the bark. A
I have tried this method, it seems to
very well, in mixed cases of mania a
ancholy, or in mania arising in weak
where there are no symptoms of con
or of oppression of the brain.

The liberal use of bark and wine is
indicated in many cases of melancho
weak pulse, want of appetite, fla
emaciation, and expressions of grief a
similar to the low delirium in typhus,
ten united in this complaint.

M. G. a married woman, aged about thir-
six, fell into a deep melancholy, attended
h the symptoms I have just described;
r evacuating her bowels, she was ordered
bark in substance, which removed all her
plaints in less than a fortnight.

J. H. a young man, was reduced by the
e series of complaints to a state of great
kness, and at length to complete amen-
He had some doses of calomel, but not
sufficient quantity to affect his mouth.
was then put on the use of bark in sub-
nce, and of the cold bath. Under this treat-
nt he recovered his strength and flesh,
came more chearful, and was enabled to
wer some questions. He has not yet re-
vered the complete use of his faculties.

E. B. an elderly woman, was attacked by
it of deep melancholy, to which she had
en formerly subject. Bark in substance,
d the cold bath, were directed for her, with
opiate at bed-time. She was cured in six
weeks

weeks, but relapsed about the same
the succeeding year.

For the other general remedies of i
I must refer to what I have published in
part of the *Medical Histories and Refle*

The management of the mind is an
of great consequence, in the treatment
sane persons, and has been much mis
stood. It was formerly supposed tha
tics could only be worked upon by
shackles and whips, therefore, became
the medical apparatus. I have abs
seen, among the rules of a lunatic h
one which declared, "that the keeper
"beat the patients, provided it wer
"with discretion, and by order of the
"sician!" I will go no farther int
shocking subject; it is now unnecess
withdraw the veil, which covers the to
the murders, which at a former time w
flicted on this wretched class of patie
places provided for their reception.

of mildness and conciliation is now gen-
y adopted, which, if it does not always
itate the cure, at least tends to soften the
ny of the sufferer.

have seen great exertions thrown away,
ttempting to influence lunatics by argu-
ts, or to surprise them into rationality by
agem. I never knew such endeavours
er any good purpose. The stories cur-
in books, of wonderful cures thus pro-
d, are, like most other good stories, in-
ble of serving more than once.

system of discipline, mild, but exact,
h makes the patient sensible of restraint,
out exciting pain or terror, is best suited
hose complaints. In the furious state,
arms, and sometimes the legs must be
ined, but this should never be done when
n possibly be avoided. When the pa-
is mischievous and unruly, instead of
ring stripes, I shut him up in his cell,
r the window to be darkened, and al-
low

low him no food but water-gruel
bread, till he shews tokens of rep
which are never long delayed, upon t
Previous to this kind of punishment,
useful to remonstrate, for lunatics h
quently a high sense of honour, and a
er brought to reflection by the appea
indignity, than by actual violence,
which they usually harden themselve

It is owing to the sense of restr
lunatics recover more quickly when
removed from home. While they
with their friends, the disease seem
quire additional strength, from the
and exclusive attention of which they
objects; among strangers, they find
sary to exert their faculties, and the
dency to regular thinking becomes
ginning of recovery. It must be a
ledged, that the desire of returnin
sometimes grows ungovernable in me
ics, and it becomes necessary to indul
with a short interview with some o

p

ticular attachment. At such times, it is
ngerous to relax too much, and to favour
error, under the influence of which, their
tial relations mistake the earnest desire of
urning, for the revival of reason. Much
-restraint, much eloquence, and artifice,
often shewn by the patient on these occa-
ns, which, according to the management
the attendants, prove either salutary or
schievous.

Though I would exclude every thing pain-
and terrible, from a lunatic-house, yet the
nagement of hope and apprehension in the
ients, forms the most useful part of dis-
line. Small favours, the shew of confi-
nce, and apparent distinction, accelerate
covery; while seclusion and solitude, dim-
tion of light, and privation of the custom-
food, mitigate the furious and malicious
ients.

It has long been my wish, that a room might
appropriated in our hospital, to convales-
cents,

cents, and that the privilege of admi
it might be made the reward of regu
haviour among the patients. Such
tinction would act powerfully in cre
habit of self-restraint, the first salutar
ation in the mind of a lunatic. For
cure of diseases of this nature, the patie
'minister to himself;' medicine may
him more early and more completely
command of his intellectual operatio
cipline must direct him in their exert

* I have known recovery take place, rath
pectedly, where I could attribute it to no
the train of reflections, produced by the vis
physician. The case to which I allude, w
ture of melancholy and mania, but melanc
dominated greatly, and the frequent appe
the practitioner excited much enquiry and
tion in the patient, which had a happier
than usual.

REMEDIES OF DROPSY.

REMEDIES OF DROPSY,

Continued from Vol. I.

n pursuance of the plan for establishing me general rules for the cure of Dropsy, I w lay before the public a short view of y hospital practice in that complaint, mixed th some private cases, since the publication the former volume. From a sufficient mber of facts thus collected, we might rn, what remedies deserve a preference the first trial; how long the exhibition of y single medicine may be continued, when ns of recovery do not appear from its use; d in what manner hydragogues may be in- mixed, with the greatest prospect of suc- ss. These are rules which books do not ch us at present: Dr. CULLEN has even clined the task of specifying diuretics, in his

his *First Lines*, because he could find r
sons for choosing among them in pr
authors. The want of discrimination
matter, is a defect which every young
titioner must feel strongly, and which
but slowly supplied; for the majo
dropsical disorders are inevitably fat
the palliative practice which incurabl
require, is not very instructive.

CREAM OF TARTAR.

HIST. I.

Joseph Bradshaw, aged forty-seven,
ted March 5, 1792, had a troublesor
cough, pain in both arms, shooting d
his fingers, and orthopnœa. He ha
ill three years, and unable, during a l
riod, to lie down in bed. His uri
scanty. He began the use of cream
tar on the 6th, and on the 8th his ur
encreased, and he was much easier
could now lie down in bed. On the
his symptoms were gone, and the cr

rtar was omitted on the 29th. His symp-
ms returned on the 26th of April, but were
gain removed by the cream of tartar, and he
as discharged cured, May 15th.

HIST. II.

Magdalen Cross, aged seventy-four, admit-
d March 5, 1792, had been ill for three
onths, of considerable anasarca in the lower
xtremities. She took cream of tartar as
sual, which purged her severely. On the
h her swellings were nearly gone, and she
as dismissed cured on the 4th of April.

HIST. III.

John Beswick, aged fifty-eight, admitted
larch 19, had anasarcous swellings of the
wer extremities, of a week's continuance.
e took cream of tartar: on the 22d his
ine was encreased, and the swellings were
ss. He was discharged cured in a few
eeks.

HIST. IV.

Joseph Wilcock, aged thirty-seven, admitted
April

April 30, had been suddenly attacke
anasarca ten days before: his scrotu
much distended. His urine was scant
took cream of tartar; on the 8th his
was encreased, but the swellings we
diminished; on the 14th the swelling
less, and he passed a great deal of uri
the 18th he was completely well.

HIST. V.

John Clough, aged fifty, came unc
care, August 30th, with anasarca of bo
There was an ulcer on the left, but n
drained off by it. He had begun the
cream of tartar before I saw him, wi
effect. I encreased the quantity
drachms. On the 31st the swelling
less. On the 10th of Sept. they had
disappeared. I believe he has since re

HIST. VI.

John Birch, aged twenty-five, ac
Sept. 27, 1792, was seized with ascit
anasarca, after the confluent small-pox

as prodigiously distended, and the cellular embrane of the penis and scrotum was com- etely filled. He took cream of tartar; ov. 3d, he was purged, passed more urine, d the swellings were less. On the 10th the ellings were much diminished; on the 16th ey were almost gone, and he was discharged on after.

HIST. VII.

Mary Newton, aged thirty-five, admitted ov. 1792, had a dry cough, orthopnœa, d had been unable to lie down in bed for me months. She had considerable anasar- in the lower extremities, and some degree it in both arms, but more in the left arm. e also complained of dull pain, and some- nes a tingling sensation, in the left arm. e began to take cream of tartar immediate- and as the cough was very distressing at ght, she had small doses of opium and mphor at bed-time. Nov. 9th, she was uch easier; her urine was encreased, and e was little purged. She continued easier, but

but the swellings did not abate till t
when the feet seemed diminished, l
legs were much distended. On th
Dec. she was much better, and could l
in bed. She was now taking six d
a-day of cream of tartar. On the 1
swellings were entirely gone, and her
tion was perfectly free; but she com
of rheumatic pains, which were remov
few days, by the use of the pulvis sud

HIST. VIII.

A man, aged sixty, applied to me,
3d, 1792, ill of ascites and anasarc
had likewise a great degree of orth
and a distressing cough. His disor
continued for a year and half, and th
ings had been preceded by a dry cou
thopnœa, and tingling in his left a
hand. I ordered him cream of tarta
the 8th his swellings were less, and h
was encreased; from the 10th to the 1
swellings fell, and he passed much uri
the 24th the swellings were stationar

ins of gamboge were therefore added to cream of tartar. On the 25th he was ter: by encreasing the dose of cream of ar, to six drachms, and then to an ounce, by occasionally adding gamboge, he was rly well on the 4th of April; and on the h thought himself well enough to discon- ue his medicines.

On the 16th of May, however, he return- as much swelled as ever, and extremely tive; he scarcely passed any water. I dered him a bolus, composed of squills, omel, and gamboge, which operated brisk- and reduced the swellings. On the 30th e swellings were stationary. He was now rged with an electuary, composed of cream tartar, gamboge, and jallap, but as the dis- der did not give way to this method, I had course, on the 20th of June, to mercurial ction, and the regular use of spiritus æthe- nitrosi. At this time, the integuments of e scrotum and penis were greatly distend- . His urine soon encreased in quantity, and

and about the beginning of July his
began to diminish. In the middle
the swellings were entirely gone:
then put on a course of tonic remed
the beginning of August, he could
easily in bed. He occasionally to
of cream of tartar, and always wi
when he was threatened with a retu
complaint.

Towards the beginning of Dece
relapsed, and after trying various
with little relief, was ordered digit
affection of the breast having becc
distressing. By degrees he took the qu
four grains a-day, and was sensible of
lief; on the 25th his swellings were n
creased, and in the beginning of Jann
entirely removed. His breathing beca
ral, his cough left him, and he could
in bed. No complaint remained, bu
ness. Feb. 27th, he called on me, f
swellings and orthopnœa.

HIST. IX.

Elizabeth Wells, aged fifty-eight, much debilitated with anasarca and ascites of long standing, began to take cream of tartar on the 8th of Dec. 1791. She obtained no relief, and died on the 28th of the same month.

HIST. X.

Mary Williams, aged two, was admitted 8th July, with anasarca and ascites, of two months duration. She was ordered a drachm of cream of tartar, in two ounces of mint-water, every night. On the 24th, her swellings were much lessened, and at the end of the month she was discharged cured.

HIST. XI.

Ann Lees, aged thirty, admitted June 18th, had been ill of ascites for a month. She was put on a course of cream of tartar, but being much debilitated, took a dose only once in three days, and used tonics occasionally. On the 19th of July, it was necessary to encrease the

the dose of cream of tartar to six
In the beginning of August her
were gone, and she was seized with
töe, for which she was ordered di
encreasing doses, and the cream of
omitted. On the 23d of August,
nearly as much swelled as ever. T
of tartar was then repeated, and she
charged cured on the 8th of Octob

HIST. XII.

John Roberts, aged fifty, admitte
had ascites and anasarca of a fortni
ation. He was ordered cream of t
six ounces of the cerevisia diuretica
rected to be given warm, every nigh
time. He was discharged cured o
of August.

HIST. XIII.

John Campain, aged twenty-five,
July 23d, had been ill of anasarca
night. He took cream of tartar: my
him on the 30th is, "much better;

own." He discontinued his attendance
August, probably having recovered.

HIST. XIV.

John Taylor, aged thirty, admitted January
ad been seized with ascites and anasarca
e weeks before, in consequence of ex-
ure to cold. I ordered him to take half
rachm of Dover's powder at bed-time,
ch sweated him plentifully, and diminished
swellings in some degree. But as his
e did not encrease, and the swellings
tinued, he was afterwards ordered cream
artar. On the 7th, his size was reduced,
his urine encreased. On the 9th, his
llings were almost gone, and the cream of
ar was omitted. A troublesome cough
ained, which gave way to the common
edies.

HIST. XV.

Mary Leech, aged forty-eight, admitted
y 1st, 1792, after a tedious dyspeptic
plaint, and severe pain in the stomach,
was

was seized with ascites and anasar
had a cachectic appearance, and syn
obstruction in the liver. She was o
use friction with mercurial ointmer
take the spiritus ætheris vitriolici.
17th she was costive, and the swelli
nearly in the same state. She was o
take five grains of gamboge, in a drau
a drachm of spiritus ætheris nitrosi.
threw up, and her complaints conti
her urine was rather encreased. Th
tic draught was repeated. Aug.
swellings were encreased. She
ordered two grains of gamboge, wit
ounce of cream of tartar, every
On the 20th, her swellings we
but she was extremely weak. She
on a course of tonic remedies, but
ed, without any appearance of recov
swellings did not return, but she d
extenuated, on the 15th of Septemb

HIST. XVI.

Frances Clough, aged seventy-fou

March 8th, 1792, had been ill for six
ks, of anasarca, ascites, and hydrothorax.
e swelling on the back of each hand was
n and puffy. She began to take cream of
ar on the 8th. Next day she was easier.
the 18th her complaints were stationary:
he 24th, no better. She was now order-
a cathartic draught, with five grains of
boge, and two drachms of spiritus ætheris
osi, which purged, but did not relieve
On the 26th she continued very ill,
the backs of her hands were greatly
lled. She died on the 28th.

HIST. XVII.

Mary Thompson, aged thirty, was admitted
. 27, 1792, ill of ascites. She was or-
ed cream of tartar, which lessened her
lling, but as the purgative effect was se-
e, it was only given occasionally, and to-
were interposed. On the 19th of March,
spiritus ætheris vitriolici was substituted
cream of tartar, and she was dismissed
ed in the beginning of April.

HIST.

HIST. XVIII.

Mary Smith, aged forty-two, adm
ly 30th, 1792, had ascites; at the sa
there was a soft, inelastic tumor on
side, which appeared to proceed fro
tion of the ovarium. She was orde
curial frictions, with sp. ætheris
Aug. 9, there was no change. She
ordered a draught, with gamboge
ætheris nitrosi. On the 13th, she
tive; the local tumor was diminishe
general fulness of the abdomen was
She was then put on a course of
tartar, and the former method was
ued. On the 23d, the cream of
encreased to six drachms, and the
repeated. On the 6th of Septem
swellings were much abated, but she
tive. She was ordered an ounce of
tartar every morning, and the friction
ted. Nov. 8th, she was again costive
cream of tartar was encreased to ten
On the 28th of December, she wa
well. She was soon after discharge

HIST. XIX.

Peter Morgan, aged forty-two, admitted
c. 1, 1794, with ascites and anasarca, took
am of tartar during a fortnight, with much
ief; his swellings were abating, when he
expectedly quitted the hospital, and disap-
nted me in my hopes of seeing a favour-
e event of the case.

HIST. XX.

John Mardley, aged sixty, was admitted
y 30th, 1792; he had been ill of ascites
l anasarca for a fortnight. He was order-
cream of tartar in the usual form. On
2d of August, the dose was encreased to
drachms. On the 20th, the swellings
re not diminished. Sept. 3d, however,
swellings were less. On the 13th, the
am of tartar was encreased to an ounce.
the 17th, the abdomen was diminished,
t the anasarca was encreased, and extend-
upwards. He was much oppressed, and
dently worse on the whole. The cream

of tartar was therefore omitted, and
ordered to take half a drachm of
aurea in powder, twice a-day, with
pint of the cerevisia diuretica. On
his swellings were the same, but h
more urine: the virga aurea was
thrice a-day. On the 27th, his u
still encreasing. On the 15th of
virga aurea was repeated four time
On the 18th, he had no purging, pass
urine, and was less swelled. On the
was in the same state, but the virga a
consumed: six drachms of cream
were therefore ordered every mornin
8th, the swellings lessened consideral
continued to fall on the 12th. D
the cream of tartar was encreased
ounce. On the 17th, the swellin
greatly diminished. Towards the n
January, they were almost gone, but
plained of dimness of sight, and viole
achs. He sometimes observed, h
that the cream of tartar did not lesser
so quickly as the green powder had d

Fe

ebruary, he was made an out-patient, and his endance became irregular; but he was dis-arged cured about the middle of April.

HIST. XXI.

Sarah Hughes, aged fifty, was ill of ascites, h some swelling in the lower extremities. e had been affected with dropsy formerly, d had been tapped not long before she me under my care, but was now encreasing ain in size. I put her on a course of eam of tartar, the dose of which was occa-nally encreased, and in the course of two nths her swellings were almost entirely re-ved.

HIST. XXII.

George Musgrave, was ill of anasarca, with me degree of ascites. I ordered him cream tartar, in the usual manner, which reduced s swellings in the course of a few weeks. By urning too early to his work, he brought a relapse, and an obstinate ascites was rmed, which resisted cream of tartar, nico-tiana,

tiana, and every other means of relie
cury was employed, as a last resou
without effect, for he died, compl
hausted.

HIST. XXIII.

A gentleman, somewhat advanced
of a very delicate habit, and long a
narian, consulted me in Dec. 1793, fo
siderable degree of anasarca, and an
ascites. I directed the cream of tar
given, but in doses of two drachms o
did not sensibly encrease his eva
either by stool or urine, but he soon
walk up stairs with less difficulty, an
course of a fortnight, his swellings w
tirely removed. He has continued
since.

HIST. XXIV.

William Bradley, aged eight years,
mitted Aug. 19th 1794, ill of a typh
a few days after I saw him, ulceratio
inside of the mouth and cheeks c

en these symptoms were decreasing, by use of tonics, he was affected with ascites anasarca, and was soon greatly distended. dered him digitalis, but it proved ineffec-. I then put him on a course of cream of ar, supporting him at the same time with e. Under this method, the dropsical ptoms gave way rapidly, and he was dis-rged cured, Sept. 25th.

HIST. XXV.

George Adams, aged one year and three-rters, had been ill of ascites for twelve nths. He was ordered three ounces of the ragogue solution every morning, which encreased to five, and as the swellings ted, to eight ounces, in the course of six ks. But the prospect of recovery was de-yed, by the accession of a smart teething-er, in the progress of which his swellings rned, and he was carried off.

HIST. XXVI.

Ruth Ratcliff, aged twenty-five, was admit-ted,

ted, April 7th, 1793. She had been
cites and anasarca upwards of two
She was ordered the hydragogue
which encreased her urine, and di
the swellings, and she was discharg
on the 18th of August.

HIST. XXVII.

John Wood, a middle aged man, l
affected with ascites and anasarca fo
weeks. He had an incessant, teazin
orthopnœa, and could not lie down
He took the hydragogue solution, in
manner, and in six weeks was di
cured.

HIST. XXVIII.

William Winterburn, an elderly
admitted Nov. 21st, 1794, ill of anas
cipient ascites, and very troublesom
He was ordered the hydragogue solu
a few days, it was necessary to enc
quantity of cream of tartar to six dr
day. On the 25th, his swellings

crease; he passed more urine and had two ools or more every day. On the 28th, his ellings were much lower, but his cough was ll harassing. Dec. 12th, the swellings were arly gone. On the 15th, his legs swelled ain: the cream of tartar was encreased to ounce. A few days afterwards, it was aug- nted to ten drachms; then to an ounce d half. In the beginning of April he was e from his dropsical symptoms.

HIST. XXIX.

Mary Byrom, aged forty-three, admitted t. 14th, 1793, had been ill of ascites for six eks. She was ordered the hydragogue so- ion. On the 17th, she passed more urine, d her swelling had decreased two inches. few days after, the cream of tartar was en- ased to six drachms. The swelling was l lessening. But on the 4th of Nov. she in encreased in size, and her urine became nty. The cream of tartar was continued, hout effect, till the 21st, when it was ex- anged for the tonic pills. They encreased r urine at first, though she did not take them regularly.

regularly. On the 20th January her s
were nearly gone. She was then pu
course of tonics, and was discharged c
the beginning of April.

HIST. XXX.

Mary Bury, aged nine, a girl of a ca
appearance, had an ascites of several
standing. The abdomen was enor
distended, and was encreasing rapidly
when I saw her, March 20, 1794: she
upon the use of the hydragogue solutio
took only two drachms of cream of t
first, but it was soon encreased to
ounce, and afterwards to six drachm
the 9th of April, the swelling had de
an inch. She then began to complain
lent pain in the lower part of the ab
which returned every night. On th
the swelling encreased again: gambo
spirit of nitre was interposed without
On the 22d, she was seized with vomiti
purging of blood, and expired. I co
obtain leave to inspect the body.

HIST. XXXI.

Martha Yates, aged twenty-three, was seized
ascites and anasarca, after delivery: the
psy had continued five weeks when I saw
She had used various remedies, and
ng others two doses of *elaterium*, after the
of which her swelling encreased. March
, she was ordered the hydragogue solu-
, which purged her severely, and some-
t encreased her urine. The dose of cream
rtar was therefore lessened to two drachms.
the 4th of April, the swelling of the ab-
en had decreased two inches and a half.
had many stools, and passed more urine.
the 11th she had fallen half an inch more;
this was the period of our good success.
swellings, after that time, encreased again,
her cough became more distressing. She
then ordered digitalis with opium, calomel
squills, and jallap, without relief. After
I directed her to use mercurial frictions,
the spiritus ætheris vitriolici, till her
th became slightly sore. The distention
encreasing

encreasing, and great pain in the left s
ing on, it was necessary to tap her.
siderable quantity of water was drawn
ter which I again endeavoured to a
mouth by mercurial frictions. Sh
however, to fill again, and the pain in
returned. A variety of diuretics was
ed; but the abdomen growing again
ly distended, another operation
necessary. After the second tapp
continued to feel violent pain, and her
sunk rapidly. She died in July, a
not permitted to open the body.

HIST. XXXII.

Robert Berry, had been ill of as
anasarca for four years. He was
course of cream of tartar, in the us
ner, Feb. 16th, 1795. On the 9th
it was encreased to six drachms; his
were then abating. On the 19th it
mented to an ounce. April 6th,
nearly well.

HIST. XXXIII.

Ellen Green, aged eighteen, had ascites, and
ipient anasarca, of a month's standing.
e began a course of cream of tartar,
arch 2, 1795; it was augmented to six
achms, afterwards to an ounce a-day.
pril 6th, her swellings were removed.

DIGITALIS.

HIST. XXXIV.

Sarah Duxbury, aged eighteen, had been ill
anasarca for some time before she came un-
r my care, Dec. 19, 1791. She was or-
red a grain of digitalis daily. Her urine
s soon encreased, and she was cured in the
ginning of Feburary. This was a slight
se.

HIST. XXXV.

Ann Brown, aged sixty-nine, was admitted
pril 11th, 1792, with ascites and anasarca of
a month's

a month's standing. She had a seve
hœa, which prevented me from usin
of tartar. I ordered her a grain of
in a draught, with a dose of spiritus
vitriolici, and twenty drops of la
Next day the digitalis was continue
urine was encreased: On the 13th t
was passed in a quantity three time
than before, and the diarrhœa was sto
an unfavourable change soon tool
On the 19th her diarrhœa returned,
swellings were stationary; on the 2
encreased, and she continued to sw
till the 29th. Early on the 2d of M
died, and was inspected in the af
When the body was opened, we foun
deal of water effused in the abdome
liver was not more than half the natu
scirrhous, and full of tubercles. The
was much indurated and diseased: th
was enlarged. The caput cæcum coli
ed diseased, and full of tubercles. T
num was inflamed, for an extent of
inches. There were adhesions betw

tum, and the posterior part of the uterus. e ovaria were small and hard.

n the thorax, there was an effusion of er on the right side, and there were adhe- s, and a slight effusion on the left. There some water in the pericardium. The rt and lungs were sound.

HIST. XXXVI.

Peter Lomax, aged twenty-one, pale and ch emaciated, came under my care for as- s, and vomiting of blood, Feb. 10, 1794. had been ill upwards of a year. He took talis in encreasing doses, till he reached quantity of a grain four times a-day. il 7th, his swelling was decreased, and the morrhage was entirely suppressed. After time, his complaint became stationary, he complained of violent palpitations of heart. On examining his breast, there an evident extension of the pulsation of heart, across the thorax. It was so dis- ly marked, in this extenuated subject, as to

to impress a forcible belief that the
ricle was considerably dilated. In
ber, the swelling of the abdomen wa
by a spontaneous diarrhœa, but the
hage frequently returned, and he ha
stools. Digitalis, opium, and wine
no relief. He died soon after, and
fused permission to inspect the body

HIST. XXXVII.

John Jones, admitted Oct. 1792
chectic appearance, pale, and extenu
anasarca and ascites in a considerabl
He took digitalis without relief, but i
ficult to ascertain the effect of his n
as he laboured under a constant, slig
um. He died in a few weeks. When
was opened, we found water effuse
thorax and abdomen, but no other
appearance, the viscera being perfect

B

BACHER'S TONIC PILLS.

HIST. XXXVIII.

William Exell, admitted Nov. 17, 1793, er a tedious fever, was attacked by ascites d anasarca. As there was reason to sus- ct obstruction of the liver, I put him on a urse of calomel, but could not remove the ellings by it, though his mouth was affected. hen ordered him the tonic pills, which ef- ted his cure, after he had persevered in ir use for a considerable time. This was ery obstinate case.

HIST. XXXIX.

Henry Robinson, aged sixty-three, was ad- tted April 7th, 1798. He had ascites and sarca, with a harassing cough. The backs his hands were greatly distended with wa- . I ordered him five grains of gamboge a drachm of spiritus ætheris nitrosi. Next he had three stools, and the swelling of abdomen had decreased. He was then put

put on the use of cream of tartar. 10th he was no better; the gamboge was repeated. On the 11th, he l stools, and the abdomen had decrea inches over night. This mornin swelled again. April 12th, he had stools, and the abdomen decrease inches. I thought this a favourable order digitalis, and he began to ta day: 13th, he had decreased anoth the dose of digitalis was augmented grains a-day. April 19th, no prog been made: the tonic pills were no ed; he took nine a-day. 21st, decreased two inches; respiration e stools since the preceding day. were continued. 25th, the size of domen was much lessened, but the was encreasing; it rose upon the c swelled him to the points of his finge the abdomen is completely reduced ural size, but the anasarca extends I ordered a small blister to be appli middle of the breast. May 1st, th

g of the blister continued. 5th, had six
atery stools, passed more urine, and the an-
arca diminished in fullness. 7th and 8th,
e anasarca was encreased again: another
ister was applied. May 9th, he was seized
th a vomiting of blood, and expired.

HIST. XL.

Mary Adshead, aged thirty-one, admitted
ept. 16, 1794, ill of ascites, took cream of
rtar without relief. She was then ordered
e tonic pills, and persevered in using them
r some time, but deriving no advantage
om them, she discontinued her attendance.

MERCURY.

HIST. XLI.

Ann Hassel, aged seven, was admitted Feb.
, 1792, ill of ascites. She was ordered to
b in a drachm of the unguentum cæruleum
tius, twice a week, and to take about
enty drops of the spiritus ætheris vitriolici
ur times a-day. On the 8th of March,

her swelling was diminishing, and she
more urine; on the 19th, the swell
gone, and she was discharged cured.

HIST. XLII.

J. Kearsley, aged sixty-four, was
about the end of April, 1792, with
He was a thin, infirm old man. I
the mercurial friction, and spiritus
vitrolici. April 30th, the swelling
and his urine encreased. June 1,
of urine was so constant, that he co
of it. The friction was interrupte
legs now swelled, but the abdomen w
ly of its natural size. June 12, every
ance of dropsy was removed, but he
feeble. He was ordered tonic m
and was soon after dismissed cured.

HIST. XLIII.

Mary Tattersall, aged twenty-th
attacked by ascites, after being
bruised in the abdomen, and both si
was prodigiously distended, and co

violent pain in her left side, but her coun-
nance was natural, and her strength pretty
tire. Some of the common diuretics were
ven, without effect, and it became necessary
employ the operation, by which eighteen
arts of water were drawn off. When the
elling was thus reduced, the state of the
cera seemed to be alarming: there was
eat fulness and hardness in the region of
liver on the right, and of the spleen on
left side. I therefore judged it necessary
direct the mercurial friction, which was
ntinued till her mouth was made very sore,
en various diuretics were given, without
creasing her urine. She became again so
ch distended, that we had recourse to an-
er puncture; seventeen quarts of water
re now drawn off. On the diminution of
swelling, the liver felt smaller and soft-
At a third tapping, seventeen quarts
re again evacuated; at a fourth, ten
arts. Finding no relief from any method
ployed, she then left the house, and went
a distant part of the country.

HIST. XLIV.

Valentine Ramsden, aged forty-s
mitted June 20th, 1794, had ascite
asarca to a very considerable deg
was emaciated and weak, with a yell
sion over the whole skin; a co
time before he became dropsical, he
tained a severe injury on the righ
the region of the liver, since whic
frequent pains in that place, sometim
ing up to the right shoulder. He h
assing cough, and copious spittin
some ineffectual trials of cream of t
digitalis, I made him use the mercu
tion, and *spiritus ætheris vitriolici*.
the beginning of the course, the ski
leg gave way, and discharged a grea
ty of water. The friction was conti
his mouth became very sore, with t
of diminishing the swellings *. Wh

* At two different times, he threw up
tities of water, which had a temporary ef
sening his size.

essary to omit the mercury, I put him on
ourse of digitalis, supporting his strength
h wine, and occasionally opening his bow-
with gamboge and calomel. He contin-
l in a languishing state, and upon the heal-
of his mouth, the swellings appeared at a
nd, and even seemed to encrease. I then
itted the digitalis, and ordered him a pre-
ation of the bark, with tincture of canthar-
s, in the proportion of a drachm to eight
nces: to this was occasionally added a
chm of oxymel of squills. Under this
rse his urine encreased, and about the
ddle of December, his swellings were en-
ly removed, but he was reduced to the
est degree of weakness. His leg still
tinued to discharge a mixture of pus and
um.

He died from mere debility, in the end of
cember.

HIST. XLV.

William Edwards, aged thirty, was admit-
ted

ted Oct. 1792, with ascites and a
his face, and the backs of his han
very much swelled. He took crean
tar for some time, without effect; a
he took squills in substance, and
more. He then had draughts with
and calomel, and the use of the la
pushed, as the swelling went on rapi
to affect his mouth in the course of
The spiritus ætheris vitriolici was th
to the course. On the 14th of N
the swellings were not decreased,
mouth was still sore. I ordered hi
drachm of Dover's powder, at l
which he rejected; however, he swea
siderably, and two days after, passe
deal of water, with the effect of less
swellings. His cough now became
some, and he complained of gener
he was ordered a dose of the di
mixture, (antimonial wine with la
every night at bed-time. On the
the report is, "swellings almost go
pr

pneumonic affection supervened, and carried him off.

BARK, WITH TINCTURE OF CANTHARIDES.

HIST. XLVI.

Henry Kay, aged eleven years, after recovering from the scarlatina anginosa, became affected with general dropsy. He was ordered a mixture with bark, and tincture of cantharides, and recovered in the course of a month. There was reason to fear, at one period of his disorder, that effusion had happened in the brain, for he was seized with epileptic fits, to which he had never before been subject, and after the cessation of the fits appeared comatose. In this emergency, his temples were blistered.

HIST. XLVII.

Evan Ellis, aged eight years, was seized with anasarca and ascites, after an attack of the scarlatina anginosa. He took the bark mixture,

mixture, with tincture of cantharides, a
cured in the space of three weeks.

HIST. XLVIII.

James Shaw, aged six years, had
and anasarca, after the scarlatina an
He recovered by the same method, i
weeks.

HIST. XLIX.

Mary Hulse, aged twenty-six, after
ous, irregular fever, which had been a
with pneumonic, and sometimes with l
cal symptoms, became anasarcous. Sh
the bark mixture, with tincture of ca
des, and sometimes with the addition o
oxymel of squills. She recovered in
time.

NICOTIANA.

HIST. L.

Thomas Brickhill, aged forty-five,
long series of pneumonic and dyspeptic

ints, became generally dropsical. From the
gree of orthopnœa and cough under which
laboured, there was even reason to sup-
e that effusion had taken place in the
st. He was put upon a course of cream
tartar, afterwards of digitalis, with occa-
nal doses of gamboge and jallap, without
aining any relief. As his swellings be-
ne very great, and his complaints extreme-
distressing, I ordered him to use the tinc-
a nicotianæ in small doses. This produced
immediate encrease of urine. It was
refore pushed to the dose of twenty drops,
r times a-day. The swellings now de-
ased very slowly, and though he used to-
s, his stomach was sometimes unable to re-
the full dose of the tincture; it was
refore varied, according to circumstances.
persevered in the use of the remedy for
eral months, till a complete cure was ob-
ed.

GAMBOGE.

HIST. LI.

J. Edwards, was admitted Ma
1792, ill of ascites and anasarca.
directed to take five grains of gamb
two drachms of spiritus ætheris vit
a draught, twice or thrice a week,
to its operation. This composition
a gentle purgative, encreased his u
cured him in a few weeks.

HIST. LII.

Ann Calvert, about thirty years
complained of great dyspnœa, dry c
pain of her breast. Respiration w
lous, and her pulse frequent. Dec.
directed her to lose ten ounces of b
to take the laxative pectoral electua
the 9th, the dyspnœa and pain, thou
being still considerable, a blister wa
to her breast. Three days afterw
bleeding was repeated, and she

ered between the shoulders. On the 9th of January, her feet and abdomen began to swell, and her urine became deficient; she was then put on a course of cream of tartar, which was continued without relief, till the 27th of March. She was then ordered to lose nine ounces of blood, and to take the infusum digitalis, in encreasing doses. This was continued, to no purpose, till the 24th of April, when the course was changed to the following bolus.

℞ Pulv. Scill. Arid. gr. iij.
Calomelan: gr. j.
Sapon. Hispan. gr. x.
Syrup. q. s. ut f. Bolus, omni nocte, hora somni, sumendus.

She was now so much disposed to costiveness, that it was necessary to augment the calomel to four grains in each bolus. She was discouraged by experiencing no relief, and attended with no great regularity, till the 4th of September, when the boluses were discontinued, and she was put on a course of Bacher's tonic pills. On the 18th, the pills were encreased to twenty-one a-day, but she

was

was so far from being relieved, tha
necessary to bleed her again, on t
Oct. 9th, she was more swelled:
took thirty of the tonic pills daily.
27th, I directed three grains of squ
grains of nutmeg, and half a grain o
to be taken every night, continuing t
pills by day. Nov. 6th, no progres
made, I changed her medicines ag
determined to try the effect of dig
substance. It was pushed to the e
four grains a-day, with a pint of the
diuretica. On the 20th, the swellin
lessened, but in a few days she grew
again. She then took six grains a-d
persisted, without farther relief, till
Dec. 1794. I then ordered her five
of gamboge, with a drachm of spiritus
nitrosi, every night in a draught, and
ture with spiritus ætheris vitriolici,
This course kept her bowels gently op
creased her urine, and relieved her br
in a remarkable degree. Dec. 18
swellings were falling; but a hard fr

ewed the dysphœa on the 22d. Jan. 5, r swellings were nearly gone, but the dysp- œa was still considerable.

HIST. LIII.

Mary Hitchcock, aged forty-eight, had long en affected with general pains, incessant ough, with great expectoration, flatulence, d spasmodic affections of the bowels. hese complaints terminated in ascites and asarca. She took the tonic pills, with the casional interposition of the gamboge aught, for a month; her swellings abated; t after another fortnight, they returned. e then took the decoction of golden-rod r a fortnight, during which her swellings ain lessened, her urine was much encreased, r appetite improved, and her bowels were pt moderately open by the decoction. Cos- eness and dysuria then came on, which re relieved by occasional doses of calomel; e swellings remained stationary, and the lden-rod was continued till our stock of it s exhausted. She was then put on a course

course of gamboge with cream c
which completed the cure in about
This patient was much debilitated,
peared to be phthisical, before the
of the dropsy.

CREAM OF TARTAR, WITH DIGI

HIST. LIV.

Thomas Bowker, an elderly man, a
ed to the abuse of spirituous liquo
under my care for acute rheumatis
was not accompanied with swellin
joints. In the course of three w
disease was converted to anasarc
lower limbs, which encreased with su
ity, that the integuments gave way
foot, and a discharge of water to
The abdomen was likewise beginni
He now complained of a tormentin
and want of sleep. I ordered him
tartar, in the usual manner, every
and a grain of pulvis digitalis, with
opium, every night at bed-time.

ys, his swellings were lessened, and all his mplaints greatly relieved. During the se-re frost of January and February, 1795, owever, his strength sunk, and he died out the middle of February.

VIRGA AUREA.

HIST. LV.

I have mentioned, in *Mardley*'s case, the od effects of this plant, incidentally. The llowing is the only other instance of drop-, in which I have been able to give it a ir trial.

Mary Brown, aged forty-nine, had been ill f ascites and anasarca for two months. After effectual attempts with some other diuret-s, she was ordered the virga aurea in de-oction, the plant being too fresh to be oth-rwise exhibited. In eight days, the abdo-en decreased two inches, but constant sick-ess and vomiting came on, and it became ecessary to omit the golden-rod. Imagin-

ing

ing that there was an effort of the
tion to terminate the disease by vo
it sometimes happens, I directed th
of squills every night. Brisk vo
excited, her urine encreased, and
men fell an inch and half. This
last period of success. Incessant
continued, without farther diminut
swellings, in spite of opiates. The
friction was attempted, but notwit
every exertion, she became coma
expired.

HIST. LVI.

Alice Boardman, aged fifty, was
cites; she had been tapped, and wh
her was suffering so much pain fro
tention of the abdomen, that it was
to repeat the operation. Nine qua
ter were drawn off. After a short
tual trial of digitalis, I put her on a
cream of tartar, by which her size w
ed, and continued to be reduced
fortnight. It ceased at length to p

nd gamboge was interposed. But finding, ter a week's farther trial, that the cream of rtar had lost its effect, though given in en- eased doses, I dropt it, and directed a ourse of calomel with squills. This seemed first to have some effect, but soon lost its ower. The tonic pills, and afterwards mer- rial friction, were employed with no better ccess. She died, two months after ad- ission.

On reviewing the events of these cases, the eference I had determined to give the eam of tartar, in dropsical diseases, appears lly justified. Of thirty-three cases in which I ve used this remedy, since the publication my former volume, twenty-four have been red, and two relieved: of the number red, two were cases of hydrothorax, fif- n were the most dangerous complications dropsy, five were cases of ascites alone; rest of anasarca. I have purposely itted several slight cases, and on the con- ry, I have excluded other cases, where the

imminent hazard of the patient's life a
no time for the fair trial of medicines
digitalis appears, in this set of cases,
disadvantage indeed; but I confess,
attention has been diverted from it,
success with cream of tartar, a remed
to no bad consequences, from indi
either of the practitioner, or the pat
am of opinion, however, that the emp
of digitalis, as a secondary remedy, c
Bowkers's case is an example, may be
ed with the best effects, and it cannot
nied, that sometimes, as in HIST. VIII
lis will succeed when other remedi
failed; but this happens with many ot
retics.

To arrive at more just conclusion
be proper to compare the result of
cases of dropsy, mentioned in these v

Cream of tartar has been given in fo
cases; of these, thirty-three have reco

* Three patients, marked as convalesce
former volume, were completely cured.

ıe have died; three have been relieved.

Digitalis has been given in twenty-nine
es, of which eleven were cured; seven
d; two were relieved; nine were not re-
ved.

The tonic pills have been given in twelve
es, of which six were cured; three died;
o were greatly relieved; another received
benefit.

The bark, with tincture of cantharides,
red four cases of dropsy from conversion,
l relieved *Ramsden* more than any other
nedy had done.

The cases of *Coxe*, and *Mary Smith*, afford
o rare instances of the beneficial effects of
rcurial friction, joined with a diuretic, in
opsy of the ovarium.

The other remedies were given in too
all a number of cases, to justify any gen-
al conclusion.

It

It appears evidently, from this c
that the greatest proportion of cure
hundred and three cases, has been
ably effected by cream of tartar.

That digitalis has produced a sm
ber of cures, in proportion, than
medicine employed.

That it is useful, in some hab
change the employment of cream
for that of digitalis; or perhaps
quently to unite their action, by
digitalis in the evening, when the
operation of cream of tartar, for
exhausted.

That the employment, and espe
repetition of tapping, tends to acce
subsequent accumulation in ascites.

That in exhausted dropsical hab
there is no permanent obstruction o
cera, or where such an obstruction

moved by other remedies, tonics may be lvantageously joined with stimulating diu- tics.

That the free, and long-continued use of ercury, sometimes brings on a depression of rength, and irritability of the bowels, from nich it is difficult to recover the patient.

Lastly, that when diuretics act successfully, ey in most cases operate early. Hence the lvantage of exchanging diuretics, at the be- nning of the disease. It appears, likewise, om some of these cases, that the employ- ent of a diuretic, which had failed at the mmencement, may be resumed at a subse- ent period of the disorder, with success *.

The power of cream of tartar, in curing drothorax, is completely established, by two ses in this volume, those of *Bradshaw* and *wton*, (HIST. I, and VII,) added to those of *rrer*, *Bayley*, and *Monk*, in the former. *Bradshaw*

* Hist xx, of this volume.

Bradshaw relapsed twice, and *Monk* both were cured by repeating their m My observations thus support the opi livered by some judicious authors, drothorax alone is not an intractabi of dropsy.

In HIST. XXIII, of this volume, able instance appears of the hydrago er of cream of tartar, even when it e other sensible effect on the system.

The greatest inconvenience whic experienced, in using this medicin in some habits it soon loses its pur fect, and with that its hydragogu It then becomes necessary to give i so bulky, that they are apt to o stomach. This might be avoided, ening it occasionally by the additio tle gamboge. Formerly, it was supp the occurrence of a diarrhœa che flow of urine; in the action of crea

tar, I have had frequent proofs of the fallacy of this remark. The patients themselves have often observed, that the swellings abated, and the urine flowed more largely, as they were more briskly purged by that remedy. Even digitalis sometimes purges, during a successful exhibition. In the case of *Dewrden*, (vol. 1,) and in another, of which I have preserved no other particulars, the action of digitalis supported a gentle diarrhœa, through the whole progress of the cure.

It appears, from HIST. XXXVIII, of this volume, that when ascites and anasarca are complicated, in debilitated habits, the anasarca sometimes gains upon the trunk of the body, while the ascites is lessening by proper remedies. From the same case, and from HIST. XVI, it also appears, that high, puffy swellings, on the backs of the hands, are dangerous signs, in such complications.

The golden-rod, anciently of great fame in nephritic and dropsical disorders, operates, in the

the dose of half a drachm of the drie
der, given three times a-day, as a
purgative, but does not prove very
(HIST. XX, XLVIII, and LV.). I may be
to mention here, that I have used it i
al nephritic cases with success, in th
It is much more mucilaginous than
ursi, and is an agreeable bitter, with
no astringency. BARCLAY has give
scription of this plant in his *Satyricon*
proves, that if botanical Latin is so
barbarous, or inelegant, the fault d
arise from the nature of the subject.

" Hæc lanceatis foliis, piloque it
" ut pene curiosos oculos fallat, cren
" que tenuibus, et sæpe in obtusam
" oras secantibus, mediocriter assurgi
" dix caulisque lignea, subtiliorem su
" herbam transferunt. Planta ad in
" terræ nunc cubitalis, plerumque e
" tior; insigne fastigium floribus ad
" turgentibus cingit, & VIRGÆ AUREA
" est nomen, sive quod aureæ ac per

næ virtutis est, sive quod præstantis metalli colorem exigui floris venustas æmulatur. Cæterum contusum in renibus calculum in innoxium pulverem solvit. Non in latere, non in vesica dolor: adeo ut tam facili remedio pudeat calculum timuisse."—This ılogium, it must be owned, is a little rhetrical. The virga aurea is, indeed, an usel remedy in nephritis, but not more so than e uva ursi, or perhaps than many other bitrs. I have always used it without opium.

In HIST. XLII, the diuretic effect of merrial friction, joined with spiritus ætheris triolici, was so powerful, as to produce a nstant flow, amounting to an incontinence urine, in a very old, and much enfeebled bject. The inconvenience was, in that se, removed by tonics: I have found it, in smaller degree, produced by other combitions of diuretics, in old persons, but I do t remember to have seen it troublesome, cepting in cases where mercury had been ely used.

Upon

Upon the whole, I think, we may
that slow and gentle methods of
ought to be instituted, in all cases
in which the general habit is affec
by visceral obstructions, or by
of the disease. That from the j
cream of tartar with digitalis, interp
gatives occasionally, much may
and that mercury should be consi
resource, only after the failure of m
edies, which produce a less sudde
permanent impression on the const

TABLE, shewing the Effects of Diuretics in fifty-six Cases of DROPSY.

	Name.	Age.	Species of Dropsy.	Remedies.	Event.
1	*Jos. Bradshaw*	47	Hydrothorax	Cream of Tartar	Cured.
2	*Magdalen Cross*	74	Anasarca	Cream of Tartar	Cured.
3	*John Beswick*	58	Anasarca	Cream of Tarrar	Cured.
4	*Joseph Wilcock*	37	Anasarca	Cream of Tartar	Cured.
5	*John Clough*	50	Anasarca	Cream of Tartar	Cured.
6	*John Birch*	25	Ascites and Anasarca	Cream of Tartar	Cured.
7	*Mary Newton*	35	Hydrothorax	Cream of Tartar	Cured.
8	*A. K.*	60	Ascites, Anasarca, and Hydrothorax	First Course, Cream of Tartar Second Course, Digitalis	Relieved. Cured.
9	*Eliz. Wells*	58	Ascites and Anasarca	Cream of Tartar	Died.
10	*Mary Williams*	2	Ascites and Anasarca	Cream of Tartar	Cured.
11	*Ann Lees*	30	Ascites	Cream of Tartar	Cured.
12	*John Roberts*	50	Ascites and Anasarca	Cream of Tartar	Cured.
13	*John Campain*	25	Anasarca	Cream of Tartar	Cured.
14	*John Taylor*	30	Ascites and Anasarca	Cream of Tartar	Cured.
15	*Mary Leech*	48	Ascites and Anasarca	First Course, Mercurial Friction, with Spiritus Ætheris Vitriolici Second Course, Gamboge, with Cream of Tartar	Not relieved. Died, after the removal of the swellings.

	Name.	Age.	Species of Dropsy.	Remedies.	Event.
16	*Frances Clough* . .	74	Ascites, Anasarca, and Hydrothorax	Cream of Tartar, Gamboge, with Sp. Ætheris Nitrosi	Died.
17	*Mary Thompson* .	30	Ascites	Cream of Tartar	Cured.
18	*Mary Smith*	42	Ascites and Hydrops Ovarii	First Course, Mercurial Frictions, with Sp. Æther. Vitriolici . .	Hydr. Ovarii relieved. Ascites, not relieved.
				Second Course, Cream of Tartar .	Cured.
19	*Peter Morgan* ...		Ascites and Anasarca	Cream of Tartar	Relieved.
20	*John Mardley* ..	60	Ascites and Anasarca	First Course, Cream of Tartar .	Not relieved.
				Second Course, Virga Aurea . .	Relieved.
				Third Course, C. of Tartar again .	Cured.
21	*Sarah Hughes* ...	50	Ascites	Cream of Tartar	Cured.
22	*George Musgrave* .	30	Ascites and Anasarca	Cream of Tartar	Cured.
				Relapsed, Gamboge	Died.
23	*Mr. T.*	50	Ascites and Anasarca	Cream of Tartar	Cured.
24	*William Bradley* .	8	Ascites and Anasarca	Cream of Tartar	Cured.
25	*George Adams* ...	$1\frac{1}{4}$	Ascites	Cream of Tartar	Died.
26	*Ruth Ratcliff* ...	25	Ascites and Anasarca	Cream of Tartar	Cured.

30	*Mary Bury*	9	Ascites	Cream of Tartar	Died.
31	*Martha Yates*	23	Ascites and Anasarca	Cm. of Tart. Mercury. Puncture	Died.
32	*Robert Berry*	45	Anasarca and Ascites	Cream of Tartar	Cured.
33	*Ellen Green*	18	Ascites and Anasarca	Cream of Tartar	Cured.
34	*Sarah Duxbury*	18	Anasarca	Digitalis	Cured.
35	*Ann Brown*	69	Ascites and Anasarca	Digitalis	Died.
36	*Peter Lomax*	21	Ascites. Dilated Heart	Digitalis	Died.
37	*John Jones*	48	Ascites and Anasarca	Digitalis	Died.
38	*William Exell*		Ascites and Anasarca	Tonic Pills	Cured.
39	*Henry Robinson*	63	Ascites and Anasarca	First Course, Digitalis. Second Course, Tonic Pills	Died.
40	*Mary Adshead*		Ascites	First Course, Cream of Tartar. Second Course, Tonic Pills	Not relieved.
41	*Ann Hassel*	7	Ascites	Mercurial Friction and Sp. Æther. Vitriolici	Cured.
42	*John Kearsley*	64	Ascites	Mercurial Friction and Sp. Æther. Vitriolici	Cured.
43	*Mary Tattersall*	23	Ascites	Mercurial Friction. Puncture	Not relieved.
44	*Valentine Ramsden*	47	Ascites and Anasarca	Mercurial Friction. Digitalis. Bark with Tinct. Cantharid.	Died, after the removal of the swellings.
45	*William Edwards*		Ascites and Anasarca	Calomel. Dover's Powder	Died, after the removal of the swellings.

	Name.	Age.	Species of Dropsy.	Remedies.	Event.
46	*Henry Kay*	11	Ascites and Anasarca	Bark with Tinctur. Cantharid.	Cured.
47	*Evan Ellis*	8	Ascites and Anasarca	Bark with Tinct. Canthar.	Cured.
48	*James Shaw*	6	Ascites and Anasarca	Bark with Tinct. Canthar.	Cured.
49	*Mary Hulse*	30	Anasarca	Bark with Tinct. Canthar.	Cured.
50	*Thomas Brickhill*	45	Ascites, Anasarca, and Hydrothorax	Tinctura Nicotianæ	Cured.
51	*J. Edwards*		Ascites and Anasarca	Gamboge with Sp. Æth.	Cured.
52	*Ann Calvert*	30	Ascites, Anasarca, and Hydrothorax	First Course, Cream of Tartar Sec. Course, Infusion, Digit. Third Course, Cal. with Squills Fourth Course, Tonic Pills Fifth Course, Digitalis in Subst. Sixth Course, Gamboge with Sp. Æther. Vitriol.	Not relieved. Relieved.
53	*Mary Hitchcock*	48	Ascites and Anasarca	First Course, Tonic Pills Second Course, Virga Aurea Third Course, Gamboge with Cream of Tartar	Not relieved. Relieved. Cured.
54	*Thomas Bowker*	56	Anasarca	Digitalis and Cream of Tartar	Died.

OF THE

PREVENTION OF FEVERS

in

GREAT TOWNS.

——— *semper ne*

Deflenda lacrymis funera, ac popu

Senec.

OF THE PREVENTION OF FEVERS IN GREAT TOWNS.

The prevalence of fevers, in large manufacturing towns, has appeared to me, from personal observation, to be encreased by several causes, the action of which might be weakened by proper care. To these causes I endeavoured to direct the public attention in my last volume; and as my observations chiefly referred to this town, I pointed out the dangerous situation of the poor, to the more opulent inhabitants, in a separate publication, which I shall insert below.

Address to the Committee of Police.

"Among the objects which engage the attention of this Committee, there can be none more interesting, than the prevention of epidemic diseases among the poor, as far as it

can be accomplished by attending to
hazardous circumstances of their
I hope I shall therefore be excuse
fering a few observations, on the
opposing the production and progre
fectious fevers, in cellars and lodgin
where they reduce great numbers o
dustrious poor to extreme distress,
nearly destroy whole families. In d
I shall confine myself to the remar
have occurred to me, in the dischar
office of Physician to the Infirmary
observations only can be interestin
Committee."

"1. In some parts of the town, ce
so damp as to be unfit for habitatio
places should be reported to the Com
ers, by whom proper representation
made to the owners, that the cellars
appropriated to other purposes.
known several industrious families lo
community, by a short residence
cellars."

"2. The poor often suffer much, from the
nattered state of cellar windows. This is a
ifling circumstance in appearance, but the
onsequences to the inhabitants are of the
ost serious kind. Fevers are among the
ost usual effects; and I have often met with
onsumptions which could be traced to this
ause. Inveterate rheumatic complaints,
hich disable the sufferer from every kind of
mployment, are often produced in the same
anner. This source of disease may be ex-
ected to admit of easy removal, for it cannot
e the interest of the proprietor of a cellar to
ave his tenants constantly sick."

"I have seen large apertures in the walls of
lodging-house, in consequence of which, a
atient of mine contracted a consumption; the
wner was applied to, in a cold, rainy season,
close the openings, so as to mitigate the
atient's sufferings from the severity of the
eather; but in vain."

[A great proportion of the aged poor
die

die of pneumonic complaints and
sy.]

"3. I am persuaded, that mischief fr
arises, from a practice common in m
row back streets, of leaving the vau
privies open. I have often obser
fevers prevail most, in houses expose
effluvia of dunghills in such situation

[During the late epidemic, it was
that the fever prevailed most, in stre
were not drained, or in which dungh
suffered to accumulate, or where t
and garbage from slaughter-houses
lowed to stagnate. I do not mean
that such nuisances produce the dis
they appear to assist its progress, an
erate as remote causes of fever, in
manner pathologists may choose to
their action.]

"As an example of the injurious
these circumstances, I beg leave to

one family, of the name of Turner, in a dark cellar behind Jackson's-row. They have been almost constantly patients of the infirmary for three years past, on account of disorders owing to their miserable dwelling. There are other instances of the same kind in Bootle-street; in one house of the latter street, most of the inhabitants are paralytic, in consequence of their situation in a blind alley, which excludes them from light and air. Consumptions, distortion, and idiocy, are common in such recesses."

"4. In Blakeley-street, under No. 4, is a range of cellars, let out to lodgers, which threatens to become a nursery of diseases. They consist of four rooms, communicating with each other, of which the two centre rooms are completely dark; the fourth is very ill lighted, and chiefly ventilated through the others. They contain from four to five beds in each, and are already extremely dirty."

[A large

[A large house, in an airy situat
remains of an abortive design for
house, has been filled with fever-pat
the admission of fresh air being ob
A considerable number of poor fam
been lodged in it, for very trifling re
building had never been comple
quickly went to decay. Many of
dows, and the principal entrance w
up, and the fever then became uni
it.]

" 5. The lodging-houses, near the
ties of the town, produce many fe
only by want of cleanliness and air
receiving the most offensive obje
beds, which never seem to underg
tempt towards cleaning them, from
purchase till they rot under their tena
most fatal consequences have resulte
nest of lodging-houses in Brook
near the bottom of Long-mill-gate
which I beg leave to recommend to
ous attention of the committee.

ouses, a very dangerous fever constantly
ıbsists, and has subsisted for a considerable
umber of years. I have known nine pa-
ents confined in fevers at the same time, in
ne of those houses, and crammed into three
nall, dirty rooms, without the regular attend-
nce of any friend, or of a nurse. Four of
ıese poor creatures died, absolutely from
ant of the common offices of humanity, and
eglect in the administration of their medi-
ines. In some other houses in the same nest, I
ave known a whole swarm of lodgers expos-
d to infection by the introduction of a fever
atient, yet so far infatuated, as to refuse to
uit the house, till all of them have been
ized with the disorder. It must be ob-
rved, that persons newly arrived from the
ountry are most liable to suffer from these
auses, and as they are often taken ill within
few days after entering an infected house,
ıere arises a double injury to the town, from
ıe loss of their labour, and the expence of
upporting them in their illness. A great
umber of the home-patients of the Infirmary

are

are of this description. The horror
houses cannot easily be described; a
fresh from the country often lies do
bed, filled with infection by its last te
from which the corpse of a victim
has only been removed a few hours b

" Another set of lodging-houses co
infected, is known by the name of
Houses in Newton-street. The con
of fevers among them seems to ar
their being over crouded, and very d

" 6. The best method, perhaps, of
effectual check to these evils, woul
oblige all persons letting lodgings
licence, and to limit them in the nu
their lodgers. By the terms of the
they might also be obliged to wh
their houses twice a year, which is a
method of preventing infection.
fever appears in a house full of loc
who are uninfected should be imm
removed to a clean house, and thei

ould be washed and scoured. When the ver has ceased, the bed-clothes and curtains the infected room ought to be scoured, or herwise cleaned, and a fresh application of hite-washing should be made. With prop- care, indeed, the worst kind of fever may confined to the patient's room, with- t danger to the rest of the family; but no pendance can be placed on the conduct of e persons to whom I allude."

"When the sick are destitute of beds, they ould be supplied by the town. It is obvi- s, that fevers, slight in their commence- ent, must be greatly aggravated, and must ten become dangerous, when the patient s on a few rags, in a cold garret, or damp llar."

[When the late epidemic was at its height, subscription was begun for supplying the ck poor with beds, clothing, nurses, and od. With much benefit, considerable abuses sulted from this plan, great numbers of the poor

poor applying to the Infirmary
pretence of sickness, for the sole pu
profiting by the subscription. It w
fore thought more adviseable to prom
scriptions for the relief of the poor i
al; as exposure to hunger and cold
ways preceded the fever, in those
where it proved most general, and
stinate.]

" 7. This plan would require the
ment of Inspectors of lodging-house
business it would be to visit house
should be reported to them as infecte
by the neighbours, or by any medica
man, under whose observation suc
should fall. They should be empo
take proper steps for checking
wherever it appears, and occasional
might be made, respecting the comp
persons letting lodgings with the con
their licences. This would answer a
sirable purpose respecting the polic
pendent of the advantages proposed r

lth. The keepers of the lodging-houses ght be required to give an account of the ne and occupation of every lodger whom y receive, and to become responsible, to a tain degree, for the truth of these reports. this means, a constant check might be intained on houses, which at present are refuge of the most profligate and danger- part of society."

"8. There is a practice, very common in all new buildings, which ought to be dis- uraged; that of putting up fixed case- nts. Some part, if not the whole of the ndow should always be moveable, especially ere there is but a single window in the om. From the want of such a regulation, have been often obliged to order several nes to be taken out of the window of a er-room, to obtain a tolerable degree of ntilation."

"9. It is sometimes difficult to prevent the ster of a lodging-house from turning a pa- tient

tient out of doors, in the height of
when he apprehends that his othe
will desert him. Some interpositio
thority should take place, in such c
for the sake of humanity, and to
the unfortunate patient from spre
disease into a fresh house."

" 10. When a house is infected
room, a nurse should be provided,
dependence can be placed, to pre
necessary visits from neighbours
quaintances. About two years ago
of the worst kind was carried from a
house, in Salford, where it had att
the inhabitants, to another in Mi
near the Infirmary, where it seize
persons, in consequence of a th
visit, made by an acquaintance lo
Milk-street. In this way, fevers a
times introduced among the servant
lent families."

[Another common mode of pr
c

tagion, is the sale of infected clothes, from
ses where the fever has run through all
inhabitants. The Committee for the
eral relief of the poor, have very properly
cted their visitors, to see all infected rags
nt, when they supply poor families with
h clothing.]

11. The prevalence of fevers, among per-
s employed in cotton mills, might be les-
ed, by an attention on the part of the over-
rs, to the following circumstances, besides
ue regard to ventilation. Personal clean-
ss should be strongly recommended and
ouraged; and the parents of children so
ployed, should be enjoined to wash them
ry morning and evening, to keep their
es and stockings in good condition, and
ve all never to send them to work early
he morning without giving them food."

"It is greatly to be wished, that the custom
working all night could be avoided. The
ntinuance of such a practice cannot be
consistent

consistent with health, and I am gla
that it does not prevail universally."

"Great benefit would be derived, i
uations, from cold bathing, if the p
be induced to use it once or twic
during the whole year. It would c
the bad consequences of the want of
on the change of which health is
much to depend; and it would lesse
quency of rheumatic complaints, b
those whose situations expose them
to the vicissitudes of the seasons,
alterations of temperature. This
best done by furnishing public bath
use."

"Many other circumstances might
ed out, which are of great importan
serving the health of the poor, but I
of intruding too much on the patie
Committee. As the circumstances
I have adverted, have been impress
mind by repeated, actual observat

the evils they produce are of the most ious and alarming nature, I should have emed myself wanting in my duty to the blic, if I had omitted to lay these reflec- ns before the gentlemen of the Committee, a time when they are occupied with plans public utility. If their attention should be is excited, to a subject so important to e general good, my design will be fully swered."

A committee was at that time appointed, regulating the police of the towns of anchester and Salford, and as they saw the gnitude of the evils displayed, and entered th zeal into my views for their alleviation, ere was reason to hope that beneficial mea- es would be pursued. Private interests, wever, prevailed over those of the public, d nothing effectual was done. The years 92 and 1793 passed over, without any ex- ordinary encrease of fever-patients, though e noxious effects of the nuisances I had entioned were always apparent. But in the

summer

summer and autumn of 1794, the us
demic fever became very prevalent
the poor, in some quarters of the to
ticularly after a bilious cholic ha
among all ranks of people. To the
causes of fever were now added, the i
of a burning summer, succeeded by
but yet warm weather, and the want
ing, and failure even of necessary
many families, occasioned by the
trade, and the great numbers of work
listed in the army, who left their ch
the slender support which could be
by the labour of the mother. In
stances, I have found that for three
days before the appearance of typ
family, consisting of several childr
had subsisted on little more than co
Many of those persons were strang
not entitled to, or unable to obtain
tance afforded by the poor-laws.
when that relief could be procure
very inadequate to the wants of a n
family. Those who are accustome

uence and ease, would shudder at the idea
f supporting a sickly mother, encumbered
ith the charge of four or five infants, on an
come of two shillings a week; this, how-
ver, is the parochial allowance in cases of
lness. The pain and horror of these situa-
ons were often greatly aggravated, by the
onfinement of the patients in small, dark
llars, where five or six miserable creatures
metimes lay ill together, in the hottest
eather; where the dead remained for whole
ys by the side of the survivors, and where
elirium and insensibility were states to be
nvied.

In the months of November and Decem-
r, an hundred and fifty-six patients in fe-
rs sometimes applied weekly at the Infirm-
y, to be visited at their own houses, and
ough a severe frost took place in the end of
ecember, yet the number of patients was
ot diminished towards the middle of Janu-
y, 1795.

The influence of hard frost in fevers, cannot be immediately p Many patients must have received tagion, and others must feel the first of the disease, about the commenc the frost: in these persons the dis run its course. It is in the period night or more, that the effect of weather appears. This considera counts for the seemingly singular the epidemic fever of Philadelphia moderately warm weather.

The symptoms of this disease we similar to those of the epidemic feve 1791, which I have described elsew cases where early assistance was so medicines and necessaries were supp fever seldom proved fatal. During tinuance of the hot weather, indee with some cases, in which the type was assumed, as early as the fourt day, and a comatose state came terminated in death.

This fever did not seem to be more contagious in its nature, than the cases which had been always occurring, though in smaller number, since the last epidemic. In 1792, I had two patients ill of typhus, in an infected lodging-house. I desired that they might be washed with cold water, and a healthy, ruddy young woman of the neighbourhood undertook the office. Though apparently in perfect health before she went into the sick chamber, she complained of the intolerable smell of the patients, and said she felt a headach, when she came down stairs. She sickened, and died of the fever, in three days.

About the same time, I met with a remarkable instance, of the ease with which contagion may be confined within certain bounds. A house, in a very confined situation, had been infected, during several years, in three of the rooms, and at one time, when the whole family was ill, four persons died from want of the common offices of a nurse. During all this time, an elderly couple, who lodged in the fourth

fourth room, separated from the infe
by the narrow staircase of the house,
themselves from the disorder, m
avoiding all communication with t
the family.

Conversions to dropsy were m
common than usual, in this epidemi

I met with several instances of th
sion of typhus to the scarlatina angi
the contrary, in autumn, 1794. In s
dropsy supervened more early, and
obstinate than usual.

As I had touched very slightly o
healthiness of cotton-mills, in the
tions addressed to the Committee o
I shall add a few remarks on that su

Whether the infection of feve
generated in cotton-mills, has been
Whatever may be said on that subj
can be no doubt, that cotton-mills, a
f

frequently managed at present, contribute powerfully to preserve and extend contagion. A great number of dirty people are confined together, during the best part of the day, in rooms, much warmer than the external atmosphere, into which little fresh air is admitted, and where the floors and the machinery are sometimes filthy beyond belief. The convalescents from infectious fevers are also admitted to resume their employment, without the use of any method, for purifying their clothes or persons from contagion: even those who retain their health, in infected houses, often carry a quantity of infection, attached to their clothes, into the working-rooms. The practice of working all night, still continued in some cotton-mills, must be added as a cause of fever. During the night, the persons employed are more solicitous to exclude the external air, while the atmosphere of the rooms is farther vitiated, by the number of candles. Watching is particularly severe, and prejudicial to children, at the early age when they begin to be employed in these works, nor is their

their repose rendered sufficiently
ble. When their night-task is finis
commonly lie down in beds, which l
just quitted by other children wh
during the day. This is, alone, a v
ous practice. But such is the natu
tite for fresh air, that many of th
creatures prefer rambling in the field
part of the time allotted to them for

I am happy to observe, that this
injurious custom is now declining.
in some extensive cotton-mills, it is
abolished; the proprietors justly co
that there are sacrifices of health and
which no pecuniary advantage can
sate.

It must be observed, that the disad
of such works, result from inatten
cleanliness and ventilation, for there
no reason why a cotton-mill should
ticularly unhealthy; on the contrary
satisfied, from the experience of a frie

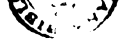
has directed a large one for several years, that by frequently washing the floors and frames, and by admitting fresh air, a cotton-mill may be rendered as healthy as a private house.

There is, undoubtedly, considerable difficulty in preserving large rooms in a healthy state, where many persons are constantly confined, as we experience too much in hospitals. In cotton-mills, where they continue to work during the night, therefore, it can scarcely be expected, that the health of the labourers should be completely secured; but when the mill is empty, during the whole night, an opportunity is afforded for complete ventilation, and in such cases, the labourers, when kept tolerably clean, are perhaps less exposed to disease, than in their own habitations.

When we examine the history of some epidemics, of the plague of Marseilles, for example, or the late fever in Philadelphia, it appears that those disorders have grown by neglect,

neglect, and have disappeared befo
lance. While the ravages of conta
confined to the more unprotected cl
poor, the opulent and the busy, far
from the sight of misery, little su
horrors with which they are sur
Their attention, when at length ro
the approach of danger to their ow
olds, often proves prejudicial at first
it rises to alarm and panic. It is
fear, overpowering every principle,
ry affection, prepares new danger
extravagant selfishness of its exertio

The sick are sequestered from eve
of relief, the dead are allowed to
heaps, or are scarcely covered from
of the survivors, while the suspicion
tion, equivalent to a sentence of death
every one, who has paid the colde
of charity to the sufferers. Under
minion of inhumanity, destruction i
to its utmost height, till the very ext
danger excites men to counteract it



the moment, that the sick are treated with kindness, instead of being avoided with horror; that houses are purified, instead of being shut up; and that the dead are interred at a sufficient depth, the pestilence, of whatever nature, begins to decline, and then gradually ceases. Less alarming epidemics may, therefore, be expected to admit of still speedier alleviation, when they do not depend upon imported contagion, but arise from such local wants and grievances, as have been specified in the preceding observations. Indeed I am persuaded, that the institution of a committee of health, in this, and similar towns, would be a measure of the greatest public utility, and well deserving the attention of the legislature, as the probable means of preserving many industrious families from destruction. If nothing more were done by such an institution, than to lighten the condition of the poor in its most urgent pressure, much good must still arise from it; but if ever the question of public health should be fully investigated, more important operations would appear

necessary

necessary than those which I have to.

It is obvious, that much sickne the poor, arises from errors, or defec lodgings and clothing. These misc be partially corrected, by occasio scriptions, and the interference of th in times of alarm and danger, but the hand of charity is withdrawn, evils recur.

The only method by which the p be provided with clean and healthy h is the erection of public lodging-h the plan of barracks, or caravanser numbers of the labouring poor, tempted, by the prospect of large flock into the principal manufacturi become diseased, by getting into fected houses on their arrival. Ot want of connections, waste their s of money, without procuring em and sink under the pressure of wa

pair. If those unfortunate persons had ac-
ess, on their first arrival, to a public institu-
on, where they could be lodged in clean,
iry rooms, and where their residence would
uickly become known, they would be saved,
t once, from the danger of disease, and the
azard of ruinous idleness. The number of
uch victims, sacrificed to the present abuses,
incredible. Encouraged by the commit-
ee, a nicer regard to cleanliness might be
ntroduced among the poor, they might, par-
cularly, be induced to use the warm or cold
ath, according to circumstances, a practice
hat would prevent many fevers, rheumatic
nd cutaneous disorders, and would promote
n alertness and cheerfulness of mind, which
ould even improve them as workmen.

Other advantages, of a still more important
ature, might be expected from such an in-
itution. One of the strongest temptations
o brutal debauchery, is the consciousness of
eing unnoticed, or contemned. In manu-
acturing towns, where the youth of both
sexes

sexes are early able to support the
their own labour, and where the
their employment produces a cons
course between them, licentiousne
ners is carried to the highest pi
may be fairly imputed, in great r
the unchecked, and disregarded
which persons of this class find t
For, whatever may be the practice
ophers, men in general are little
embrace virtue for her own sake, b
ing her dictates, are apt to kee
temporal rewards in view. Solita
nial, among the labouring poor, is
produced, I fear, by avarice. I a
asserting, that the poor have no
am convinced that they possess ma
nessing their conduct every day,
trying situations. But I apprehe
placing them in a more conspicuo
view, according to the scheme
where they would come under the
of a respectable public body, a po

ive would be added, to restrain the vicious, nd to encourage the well-disposed.

By this means, the retreats of the thief, and ne robber, would also be much straitened; or though it would be improper, and indeed mpossible, to bring persons into public lodgngs by constraint, yet the number of private odging-houses would be greatly diminished, nd if the plan of licensing them were adopted, it would become very difficult for criminals to avoid the pursuits of justice. Thus he two great objects, of preventing crimes, nd facilitating the detection of the guilty, ould be promoted.

To persons engaged in sedentary employents, or in those attended with little bodily bour within doors, which is the case in most f the Manchester manufactories, public lodgngs might contribute much to the preservaon of health, by affording them opportunies of using some agreeable exercise, such as icket, on their return from work. At present,

ent, the workman, after leaving the
wastes his evening in the alehouse
about the streets and fields to a lat
the purpose of intrigue.

Next to personal cleanliness, an
exertion, the preservation of heal
on occasional changes of clothing.
it would be practicable to promo
the aid of a public institution, mus
ject for discussion, if such an
should ever be established. Infec
strangers, might, at least, be acco
at a small expence, with flannel su
own clothes should be washed o
which is practised in some infir
ought to be insisted upon in all.
formed, in some parts of Manchest
curing clothes at a moderate pric
haps an extension of that plan wo
the purpose.

The establishment of sick clubs
liable to many abuses, might be ad

y watched over by a committee of health. I ave seen repeated instances, in which those lubs have displayed the most unfeeling ava- ice. It has often happened, that when an Infir- ary patient has procured an attestation from e, that he was sick of a fever, his club has elayed the relief due to him for eight or ten ays, in hopes, that the disease might cut him ff, and deliver them from the burden of upporting him. I have been many times hocked, by the tyrannical conduct of mer- enary overseers, who uniformly treat the oor as criminals, whom they are appointed punish, but when the poor treat each other ith cruelty, I learn to make some allowance r the insolence of those petty despots.

The distress and ruin of many families, ise from other circumstances, which might e easily prevented by a public committee. young couple live very happily, till the oman is confined by her first lying-in. The essation of her employment then produces a eficiency in their income, at a time when expences

expences unavoidably encrease. fore wants many comforts, and ev dulgences necessary to her situ becomes sickly, droops, and at last by a fever, or pneumonic comp child dwindles, and frequently d husband, unable to hire a nurse most of his time to attendance on h child; his wages are reduced to a t ation and want render him at las and the whole family sometimes per the want of a small, timely sup their future industry would have paid to the public. If such mis even when the master of the famil trious and sober, it is easy to im distress of those unfortunate creat depend on a brutal debauchee. juries which defenceless women u those situations, are too horrible f tion: I have met with many instan curable diseases, occasioned by kic from the husband, in his paroxysm kenness. Scirrhus of the liver, a

varium, and consequently the worst species of dropsy, have been thus produced.

It would be necessary to add a few rooms for the reception of the sick, to every institution of this kind. Those destined for persons who may be seized with fevers, notwithstanding the precautions enjoined, should be so contrived, as to seclude the sick from communication with every one, but the necessary attendants. A false opinion prevails respecting fever-wards: it is supposed that they perpetuate and extend infection. But I entertain no doubt, that under proper management, they would produce the very opposite effect. In our Infirmary, we are perpetually liable to have the contagion of fever introduced, either by the admission of patients in whom the disease is lurking, or by their receiving visits from persons coming out of infected houses. Formerly, when a fever began in the hospital, it was found necessary to dismiss almost all the patients, a measure pro-

ductive of much inconvenience, an
alarm. But since a few rooms were
the year 1792, separated from the r
wards, for the reception of such case
the infection has been more than or
duced, yet by removing such pa
shewed symptoms of fever, at thei
pearance, into the secluded ward,
venting all communication betwee
their nurses, and the other patients
vants, the progress of the comp
been stopped, and no reason h
occurred, for a precipitate dischar
tients.

The necessity of such a plan as th
suggested, may possibly seem doubtfu
who are not accustomed to visit the h
of the poor; but I am fully conv
personal observation, that the ravag
epidemics as that of 1794-5, cannot
tually prevented, without some exe
this kind. Should such a design
seriously agitated, the expences o
ta

tablishment cannot form an objection, for attempts to secure the health and morals of the labouring poor, are certainly consistent with the true spirit of national œconomy.

DILATATION

of the

HEART.

DILATATION OF THE HEART.

n the former volume, I gave an account of
veral cases, in which this affection varied
om the common descriptions which occur
medical books. I shall now add a few
ases, in confirmation of what I have there
dvanced.

Sarah Moors, aged twelve, a girl of a very
ill habit, florid, and healthy in appearance,
ad been attacked by a violent palpitation of
ne heart, about a year and half before I saw
er, in consequence of a rheumatic fever.
The apex of the heart was felt to strike between
ne sixth and seventh ribs. She complained
f orthopnœa, and was often obliged to sit up
bed all night. Her face often swelled;
sometimes

sometimes her feet. She felt a pai
ling in both arms, reaching to th
her fingers; her pulse was quick;
natural. Pain across the breast
times felt. She was directed to t
fusum digitalis, which was contin
produced sickness, but no relief fr
pitation, though a small bleeding
posed. The digitalis was then o
she was put on a course of spiri
vitriolici. From this she derived
ble relief, and though her legs sw
sionally, grew very tall, and stron
five months after she came unde
she had a more than common app
health and vigour, though the palp
encreasing; but after this effort of
she began to languish, and was gr
duced to the lowest degree of weal
died at a considerable distance
chester, so that I knew the particu
last stage only by report. The vit
afforded some relief, till within a
time of her death.

John Fletcher, mentioned before, complained of constant pain in the lower part of the abdomen, which sometimes extended upwards, to the region of the heart; the pain was so great, that he commonly lay upon his face. As he had no diarrhœa, no fever, nor any symptom of worms, and the functions of the bowels did not appear to be at all disturbed, I enquired whether he ever felt a palpitation of the heart, and being answered in the affirmative, I thought it proper to examine the breast. I found that the apex of the heart struck between the sixth and seventh ribs; the stroke gave a jarring sensation to the hand, and was visible to the eye. His pulse was feeble and hurried, his tongue clean. He had a dry cough. I ordered him to take thirty drops of tincture of castor thrice a-day, from which he derived considerable benefit for a time. The remainder of this case, I have given under another head*. This boy, at present (March 1795) has advanced very little in his growth, and will probably become

* On the Effects of Pneumatic Medicine.

become deformed, but his comple
countenance are natural.

E. Larkin, a girl aged eleven,
weak, and rather distorted for fo
About six weeks before I saw he
obliged to carry several pailfuls of
her head, and then, for the first ti
palpitation of the heart. I found tha
sation extended across the thorax, a
what upwards: the apex of the hea
to be nearly in its natural place; th
arteries palpitated strongly. Her
frequent and feeble; her countena
Her left foot and ancle swelled s
and she occasionally complained of
above the elbow of the left arm.
also constant pain and soreness, at f
the scrobiculus cordis, afterwards i
pogastric region, and of this she co
much more than of the palpitation.
the spiritus ætheris vitriolici, and ti
castor, without relief, for several mo
then, by my desire, suspended th

dicine altogether. A month after she had continued her medicines, the œdema of lower extremities disappeared, and the pitation was rather less. From this time, eard nothing of her till a year afterwards, en I found her nearly in the same state, tainly no worse; and as far as I could lge, from examining the motion of the rt, the dilatation seemed to have made no gress. I have never met with a case, in ich the affected part of the heart was so arly indicated. There was every reason believe that the right auricle was dilated.

Samuel Holt, a house-painter, fifty-five rs of age, had been subject to palpitations the heart for three years. The stroke of apex was felt near the tenth rib; it af- ted his head strongly, and even gave it an ternal motion. He often felt palpitations his neck, and sometimes in his left arm. e could not lie upon his right side, in bed, r easily on his left, and was sometimes ob- ed to turn upon his belly for relief. His face

face was usually swelled in the mo
his legs swelled towards night. His
sometimes distended, and within th
weeks, he had been subject to co
pain in the lower part of it. The
full, and quick; his urine rather sc

He had been frequently affecte
flammation in the great toe of the
which was preceded by sickness,
on about day-break, after his first
inflammation usually relieved the p
and seemed to be approaching w
saw him. About a year before, h
fered a severe pneumonic attack,
he was blistered.

He had been accustomed to p
colours, but was obliged, by the v
his complaints, to relinquish his em

I ordered him to take half a grain
with half a grain of digitalis, every
and to drink a pint of the cerevisia

ily. Next day he was easier, and the palpita-
on was diminished: his pulse was still quick,
d rather full. Four days after, the toe in-
med; the palpitation was much lessened, and
e pulse became considerably softer. The
o of the foot was swelled, and there was a
tinct gouty inflammation on it. Next day,
e swelling and inflammation of the foot
re decreased, and the palpitation returned
h much violence. I directed the ancle to
blistered, and, as he was costive, opened
bowels with the infusion of senna. A
k afterwards, the blister continued to dis-
rge, and was very sore: the palpitation
less, but he complained of a troublesome
gh. The palpitation continued to de-
se after this period, till he thought himself
enough to be discharged. There never
any remarkable encrease of urine in this
, but I was not quite sure that the reme-
were carefully administered, the patient
g very capricious, and fond of prescribing
himself.

J. Blakeley,

J. Blakeley, aged eighteen, co
constant palpitation of the hea
months standing. The apex seem
considerably below the usual plac
greatly relieved by taking digital
um, in small doses, and drinking
cerevisia diuretica daily.

From these cases, it appears, th
of the heart may be retarded in th
by different causes, and particul
action of diuretics; that in a cer
growth, dilatation of the heart is
patible with general fulness of th
even, during a certain period, wi
gree of vigour; and that local i
whether produced by specific di
the action of rubefacients, posses
of alleviating this complaint, eve
ported by organic læsions of the
Hence, perhaps, the utility of iss
of angina pectoris.

OF THE

EFFECTS

of

PNEUMATIC MEDICINE.

OF THE EFFECTS OF PNEUMATIC MEDICINE.

nce the publications of Dr. BEDDOES on
s subject have appeared, I have been de-
ous of trying what prospect of relief his
thod affords, in disorders which do not
ld to ordinary remedies. Had I deferred
s publication till I had collected a greater
mber of cases, my information might have
en more satisfactory; but in the moment
enquiry, every additional testimony has its
. In the following cases, the species of
exhibited were procured from the appara-
constructed by Mr. WATT, according to
directions given in his pamphlet.

1. *William Whitehead* laboured under a
nfirmed pulmonary consumption, which had

been preceded by a spitting of b
cough was very harassing, his resp
ficult, his pulse quick, and his app
gone. On the first day of his us
drogene air, (which was prepared fr
acid and iron filings, previous to t
the apparatus) his pulse, at eleven
noon, was 110. He complained of
the extremities, after inspiring the
two bladders, in which the propo
drogene was about a fourth. N
in his breathing was perceivable,
an hour that I staid with him, afte
bition of the air, but he remarked,
not cough again till the evening.
a restless night, yet next mornin
was only from 60 to 70. The a
exhibited morning and evening, w
relief of all his symptoms, and he
with little disturbance from his co
the nights were frosty, and the w
generally foggy. After continui
for a week or two, we were accid
liged to suspend the use of the re

re the arrival of Mr. Watt's apparatus. I d dropped all his other medicines on begin- ng to exhibit the hydrogene, and I now al- wed several days to pass without renewing em. During this interval, he felt very eat relief. His cough abated; his respira- on became perfectly free; and his sleep and petite returned. The hydrogene procured om the apparatus continued to relieve him, t it became necessary to encrease the pro- rtion to a third. In the course of some eeks, however, the progress of the disease, d the rigour of the season, overpowered e effects of the hydrogene: it ceased to give se, and was at length discontinued.

2. A lady had been afflicted, upwards of even years, with a severe spasmodic asth- a. The paroxysms generally continued om twelve to twenty-four, or forty-eight ours, and were sometimes so violent, as to eprive her of respiration and pulse for sev- ral seconds. They commonly terminated ith sickness and vomiting. During the last

two

two years and a half, they recurred n
quently, so that she was seldom fr
them above four or five days togethe

She began to use the hydrogen
proportion of a fourth, not long b
commencement of the hard frost, in
1795. The state of the weather, on
of the sudden vicissitudes, could ha
been more unfavourable.

She had used a great variety of
with little benefit. Opium relie
spasms, but brought on a degree o
and debility hardly supportable. A
been subject, several years before, t
matory complaints in the chest, a
was reason to apprehend that conside
hesions of the pleura had taken pla
induced to expect most benefit, in
from the hydrogene, or hydro-carbo

Great chillness in the limbs succe
ery exhibition of the air; the fits,

were evidently postponed, for she enjoyed a more considerable interval of ease, than she had experienced for two years and a half, although the weather was very severe. The intense frost, to which she had always been remarkably sensible, at length brought on paroxysms, during which she used hydrogene, hydro-carbonate, and afterwards oxygene, without effect. The oxygene was exhibited, from the analogy of the action of spirituous liquors, which frequently terminate an incipient paroxysm, in this species of asthma. Discouraged by this ill success, the remedy was laid aside for a short time, but on the recurrence of a fresh paroxysm, the hydrogene was again given, in the proportion of a third, or rather more, in a bladder which contained about six quarts. The relief was not immediate, nor suddenly complete; but in the course of a quarter of an hour she was able to walk up stairs to her room, and passed a tolerable night. Another paroxysm was stopped, a few days afterwards, in the same manner. She is still liable to returns of the spasm, but

on

on the whole, has derived more reli
the pneumatic medicine, than from a
remedy.

3. *John Fletcher*, aged eleven, had
stant palpitation of the heart, attend
signs of a dilatation of that organ, wh
been described in another place. He
lieved at first, by moderate doses of
of castor, but in the course of a y
medicine lost its power, though the d
did not seem to proceed with much
Conceiving that his distress might be
ed, by diminishing the stimulating
the blood, I put him on a course of
gene, suspending all other remedie
some time, he felt no sensible ef
length, the proportion of hydroge
encreased, giddiness came on afte
dose, but the palpitation was not a
lieved. I then directed the hydro-ca
air, which affected his head so much,
dropt down after the last dose. Fin
palpitation not diminished, even after

I

thought it prudent to discontinue the pneu-
atic course, and ordered him half a grain
digitalis every night at bed-time, which af-
rded temporary relief.

4. I administered a dose of oxygene, in the
ual proportion, to a man who had long
en an out-patient of the Infirmary, on ac-
unt of an asthma, which had been formerly
lieved by the free use of bark and opium.
e felt great relief, immediately on inspiring
e air, and said, that if his present feelings
uld be continued, he should think himself
ll. His death, which took place suddenly,
few days after, disappointed me in the ex-
ctations I had formed, from the commence-
ent of the course.

5. *B. Knowles*, a middle-aged man, had
en affected with a severe cough, during
e years; his expectoration was not consid-
able, but he was greatly emaciated. The
dnata of both eyes was of a pearly white:
s pulse was small, and generally above an
hundred.

hundred. He took the hydroge
ent proportions, with little or no
fect. At length, by repeating the
tion of the air three or four tim
complained of much giddiness,
feel his cough relieved, nor wa
materially altered. The hydr
was afterwards used, and the
precisely the same. The cours
tinued for a month, in the whole,
end of that time, he was no be
respect. It was then discontinu
was relieved by the common dem
edies, with opium.

6. *Anne Banks*, twenty-one ye
had complained for six weeks
cough, and copious expectorat
pulse was irregular, and much hu
erally 110, or upwards. She ha
rigors, night-sweats, her voice bec
and her countenance was rather s
menses were irregular. On th
March, I ordered her a dose of

bonate air, in the proportion of one-twentieth. Her pulse was encreased in frequency immediately, and she fancied herself rather easier, excepting that considerable giddiness was produced. During the rest of the day, she was much better than usual, and remarked that her voice was stronger than it had been at any time during her illness. I could not learn, however, that her cough had been diminished. She slept better at night, probably in consequence of taking an opiate. She returned next day to the hospital, and took another dose of the air, but not finding so much relief as at first, she did not come again for several days. April 2d, she had a dose of the hydro-carbonate in my presence: the proportion was one-twentieth, in a bladder which could not contain above a quart. Her pulse became more frequent, and was about 120, after she had inspired the air. She perceived no other effect than slight giddiness from the dose; I therefore desired her to take another from the same bladder, which was filled again, with the same proportion of hydro-

hydro-carbonate. She drew in a v
inspiration from the bladder, and im
ly fainted; she revived almost insta
only complained of giddiness and
in her head. She continued to in
contents of one bladder, once a-
considerable relief. Her respiratio
easier, and she slept better, though
sweats still recurred, and her cough
diminished. Her pulse was still qui
missing her dose of air one day, she
had felt a want of it; that her brea
been less free, and on the succeedi
ing her expectoration was streal
blood. April 7th, she had a severe
ter using the hydro-carbonate, her p
tinued quick, and her cough trouble
no more blood was expectorated.
her pulse was as much hurried as
cough was not easier; but she thought
rather stronger. On the 10th, I foun
had prevailed on the person who ad
ed the air, to encrease the proportio
dro-carbonate to a fourth, which

ncope. She also complained of a head-ach, d a sense of tightness in the head, for sev- l hours after each dose. I immediately dered the proportion to be reduced to one- th, and that it should be exhibited thrice day. Her cough was now rather more ublesome, particularly in the night. April th, her pulse was frequent, but more irreg- r; she had passed two very restless nights, d her cough had been very distressing. I dered the hydro-carbonate air to be omit- , and substituted the hydrogene in its place, the proportion of one-half. April 14th, had slept better since taking the hydro- ne, her pulse was softer, but still irregular, head-ach was gone, and her countenance s paler. Her cough was rather more ublesome. April 15, she had a stronger or than usual, to-day, succeeded by a se- re hot fit; her cough was no better; her lse was very quick, and her breathing ch hurried. She felt no sensible effect m the hydrogene; it was therefore encreas- to the proportion of two-thirds. The bladder

bladder in which it was include
about six quarts. April 16, sh
better, and sweated less; her cou
ly as usual; her pulse still very
was directed to use the air three
that is, to take twelve quarts of th
in twenty-four hours. On the
ever, I found that, through
gence, she had only used the air
preceding day. She had slept to
but was no better in any other res
morning, she was sick, and felt gr
in her limbs, after inspiring the
20th, she had rested better, a
sweated for the last three nights.
was nearly as troublesome as ev
spit less. She was more enfe
plained of want of spirits, and l
worse. Her pulse was frequent,
On the 21st, she had again sle
had not sweated. Her cough
lieved. Her pulse was very ir
small, but she thought herself rath
The air was accidentally omitted,
day, when she thought her co

orse. The hydrogene was administered with
eat regularity, twice a-day, till the 26th,
hen her cough was not relieved; her ex-
ectoration was more copious and easier;
e slept tolerably well, and had sweated a
tle during the last three or four nights.
er strength was not encreased; she looked
ore languid and emaciated, and could in no
spect be pronounced better. I therefore
rected the exhibition of the gas to be dis-
ntinued, but recollecting that *Whitehead*
d been much relieved during the intermis-
on of the hydrogene for a few days, I did
t order any medicine in its place. After
interval of three or four days, no change
any kind appearing, I put her on a course
demulcents and opiates.

7. *Martha Adams*, about thirty years of
e, was ill of a peripneumony. Finding
e dyspnœa continue on the tenth day, after
eeding, blistering, and keeping the bow-
very open, I thought it fair to try whether
e use of unrespirable air would afford re-
lief,

lief, as it might be expected to d
Beddoes's theory. Mr. William
the goodness to superintend the
tion of the remedy. She inspir
tents of two bladders, each capa
taining a gallon; the hydrogene w
the proportion of one-third.
effect was produced. She took,
time, a mixture with opium, antin
and mucilage of gum arabic.
she had slept rather better, but
and dyspnœa were not at all relie
rected the hydrogene to be rep
again inspired the contents of t
with the same proportion of hydr
finishing, she felt herself sick,
sensible of any alteration in the
cough or breathing. As the ga
produced a noxious effect, withou
lief, I thought it improper to re
periment.

This case destroyed the flatte
tations which I had formed, of fin

rful auxiliary in this species of gas against pneumonic inflammation. Every circumstance was here favourable to its action. The inflammation was abating, when it was exhibited, yet it did not appear to accelerate recovery in the smallest degree.

8. *Helen Jones*, aged eighteen, had been ll for nine months, of an incessant cough, ome expectoration, and night sweats. She aboured under severe dyspnœa, and her face vas flushed, and much swelled. In the ourse of the disease, her legs swelled also. put her on a course of hydro-carbonate, vithout any other remedy, and she persevered n it during six weeks. The air was given wice or thrice a-day, and the proportion was ncreased occasionally, till it affected her ead. She never derived one moment's reief from it. Finding her symptoms exasperted, and that her legs began to swell, I omited the pneumatic course, and gave her digialis, in conjunction with cream of tartar, asisted by common demulcents. She died, about

about ten days after the omission o
I considered this as a lost case fro
otherwise I should have given up
bition of the gas much earlier.

On opening the body, the lu
found perfectly full of tubercles,
being cut open, were seen to conta
ous matter. There was no mark o
ation in any part of the lungs. All
viscera, in the thorax and abdo
completely sound.

From these cases, as far as they e
cannot draw any conclusion highly
of the pneumatic medicine. No b
obtained from a long course of
case of tubercular phthisis, where
certained by dissection that suppu
not taken place. In a very rece
phthisis, that of *Anne Banks*, the relie
by the hydrogene was very trifling,
to what I have produced in simila
common methods of practice. Bu

most disappointed me, is the want of efficacy of this medicine, in a curable disease, a common case of peripneumony, in which the patient recovered by the usual remedies. *Knowles*, also, (case 5th) was greatly relieved from his complaints, by ordinary medicines, after a long, ineffectual course of hydro-carbonate. I have no reason to suspect want of accuracy in administering the gases here. They were prepared exactly according to Mr. Watt's directions; in the beginning of most of the observations, they were exhibited in my presence, and I have carefully noted every accidental omission. That they were given in doses sufficiently strong, is evident, from the intoxication or deliquium which was produced in most of these instances. On the other hand, it must be confessed, that the hydrogene gave much relief to *Whitehead*, in the advanced state of phthisis, and that some benefit resulted from it, in a chronic asthma (No. 2). As far as my observation goes, therefore, I have only found the pneumatic medicine palliate, and even

that effect has proved but transitor
the case, No. 3, no conclusion can

I am aware, that no positive
should be drawn, from the small
cases in which I have employed thi
for I know that practitioners often n
series of cases, greatly favourable,
wise, to modes of practice, conside
which it is necessary to compare wit
of a great number of other cases, in
ately taken. I shall, therefore, c
use the pneumatic medicine, but on
disorders which prove intractable t
remedies, till I can arrive at certai
sions respecting it. For I think
inexcusable, to hazard the life of a
tient, by substituting uncertain rem
those which experience justifies us
ing. But I confess that I shall p
my trials, with hopes much reduced
eagerness greatly abated.

I was induced, by Mr. Cartwr

ount of the effects of yeast, in typhus, to or-
er it in one case, in the intervals of adminis-
ring the bark. The first dose produced
ch violent sickness, that I did not choose to
ursue the experiment farther; and I under-
and, that the same effect has attended its
hibition by other practitioners.

Whatever may be the result of this en-
uiry, great praise is due to Dr. Beddoes,
r the liberal manner in which he has com-
unicated his ideas to the public. He has
pened a new, and extensive train of observ-
ion, in which even disappointment may
rove instructive, and in which success, if his
athological views could be realized, would
lace him high among the benefactors of man-
ind.

APPENDIX.

BIBLIOTHECA BODLEIANA

APPENDIX.

SOME REMARKS
on
Dr. Tattersall's
"BRIEF VIEW OF THE ANATOMICAL "ARGUMENTS FOR THE DOCTRINE OF "MATERIALISM."

Perhaps I ought to apologize for calling the public attention, to an attack, which has been made by Dr. Tattersall, of Liverpool, on my argument against the doctrine of materialism. As he has done nothing to elucidate the subject, and as the chief part of his pamphlet has no relation to my Essay, I should have left my reasoning to protect itself by its own force, had the Dr. conducted his assault in a liberal manner. But as he has employed himself

himself chiefly in misrepresenting
and in throwing out very unjust an
er insinuations respecting my int
think it necessary to expose his pe
to the censure which it deserves.

It is impossible, however, to read
serious objections to the motto of
without a smile. He chooses to con
a talisman, calculated to unnerve th
" and superstitious," whom the Dr.
sirous of bringing within the circle
alism, and whom nothing but his ow
ing rod can disenchant. It is singula
that his objections to the motto, a
exordium, which he learnedly call
" neous matter," should turn upon
that they are calculated to engage m
in favour of the opinion which I ha
taken to support. It is more sing
he should suppose me to throw out
the vulgar and ignorant, in a tract
to a man of great knowledge, and
talents, and not calculated for the
readers.

But it is not easy to discover the Dr.'s
eal opinion of this alarming exordium; for
t p. 6, "This matter is so evidently ad-
dressed, *ad populum*, and so much calculat-
ed to engage vulgar prejudices in his [my]
favour, that an opponent is obliged to shew it
to be foreign from the purpose:" But at p.
, the same observations "might have some
propriety, when addressed to an old ac-
quaintance, and written in the sportiveness
of intimate friendship; but they are cer-
tainly improper in an author, writing grave-
ly upon a metaphysical subject, and ap-
pearing before the bar of the public."
trum horum?

However, the Dr. has fully evinced his
nse of the force of those introductory ob-
rvations, by the artifices to which he has
d recourse, in attempting to evade them.
e quotes from me this passage; 'Hypoth-
sis is a mistress not easily abandoned;'
d adds, "This is very true; but I should
ave thought that there would have
"been

" been greater propriety in a
" whose doctrine is more modern
" such an observation to an imm
The Dr. has here falsified my
that he might " shew it to be fo
" the purpose." I had said, ' hyp
' mistress not easily abandoned,
' *courted by philosophers of both side*
cautious suppression of one clause
tence, for the purpose of affixin
sense to the rest, contrary to my
might, if it were a single instanc
the effect of habitual inaccuracy,
comprehension. But in the very
(8) we meet with another passage,
the same manner. " I think," say
" the writers," who ' seem to hav
' the spirit of the old Grecian in t
' contest,' " have been the advoca
" materiality; and that they are t

+ Memoirs of the Lit. and Philos.
Manchester, vol. 4. p. 21.

'who have run their metaphysical career,
'without stopping to enquire for facts.

"If I consider either the persons who
'have defended materialism, or the ability
'with which they have conducted the de-
'fence of it, I cannot think that a quotation
'from Homer, respecting boys describing
'fanciful figures upon sand, and wantonly
'destroying them again, is applicable to such
'men, or to their writings *."

Would not any one imagine from these
trictures, that I had abused the writers in
avour of materialism, without decency or
liscrimination? Now the *complete* passage in
ny Essay runs thus. 'Many writers seem to
have inherited the spirit of the old Grecian
[Democritus] in the present contest. They
have run their metaphysical career, without
stopping to enquire for facts, and there has
been great sport, in the erection and demo-
'lition

* P. 9.

'lition of the fanciful opinions
'*party has brought into play.*'—The
the quotation from the Iliad. It
that I meant, in this passage, to ce
writers on both sides of the questic
sophist may be said to have eaten
of Democritus; and my remark
tion may be applied to all dis
writers, who hope to raise thems
notice, by misrepresenting the opi
expressions of others, and then amu
selves with the boyish destructio
own dirty work.

When I compared the conduc
champions of materialism, to that o
who is said to have declined meeti
emy, and to have contented hi
parading on the strand, where no
was offered, I did not expect to b
by an antagonist, who should pro
instance of the truth of my observa
Dr. T. after a faint skirmish with

nent, has faced about, and fallen upon the doctrine of spirit, of which I had not said one word, with his "anatomical argument," in which I can discover nothing anatomical.

But even this is nothing, when compared with the bravado in p. 10, where the Dr. seems determined that no man shall write, or object seriously against the doctrine of materialism. To answer this passage gravely, would really "exceed all power of face." I have never understood that materialism was so firmly established, as to subject its fair opponents to any censure, excepting that of some bigots, who seem resolved to support it at any price.

In answer to the facts alledged by me, Dr. T. says, he "could produce a thousand testimonies from medical authors, of the highest authority, to the assertion, that when "the structure of the brain has been injured, "the process of thought has been impeded "and

" and changed *." Certainly this ha
been reckoned the strong-hold of th
rialists. To deprive them of it, by pr
opposite facts, and to shew the perpl
tending the boasted mechanical th
thinking, were the objects of my Ess
T. has objected to the facts, first, a
to his laudable custom, by misrepres
" It is only asserted," says he, " that
" of the structure has been injured
" time †." To shew the falsehood
statement, I need only to refer to
assertion, which he had quoted in p.
' at different times, every part of the
' had been deeply injured, or totally
' ed.' But besides several cases of
injury, I had given instances of
depravation of structure, in p. 42 a
my Essay.

Another instance of Dr. T.'s pr
garbling arguments, occurs in p. 12.
" says," ' when the parts of the brai

* P. 11. † P. 12.

in common language, give origin to the nerves supplying those organs, are injured, the senses are in general proportionably affected.' "This we all know, and I should have thought it would have made against him; but he says, it" 'seems to point out a difference in the causes of thought, and sensation.' "I do not know what he can mean by the causes of thought, as distinct from the causes of sensation. Have we any other ideas than those of sensation*?" This, as Dr. Tattersall has stated it, is certainly nonsense, but he has made the blunder, for the sake of combating it. My reasoning was this: any part of the brain may be destroyed without injuring the intellectual powers; but no part of the brain subservient to the organs of sense can be injured, without proportionably affecting the functions of those organs. There seems, therefore, to be a difference between the cause of thought, and the cause of sensation, that is, supposing the brain to contribute to both.

I now

* P. 13.

I now come to the only objectio
relate to the essential part of my Es
" appears," he says, " from my own
" that the injuries of the brain w
" times followed by injury of the fa
And he refers to two cases, quoted
John Pringle, in one of which " it is
" the patient was not altogether inse
Sir John Pringle's words, as quot
Essay, are, that the patient *had*
delirious, nor altogether insensible ‡
other case, the patient 'answered r
'when spoken to,' from which Dr
cludes, that his faculties must have
paired ¶. In the case quoted fr
gagni, the senses 'were not affecte
'last, and then not permanently;
therefore, supposes that they *must* h
affected early ‖, and in proportion t
ease of the cerebellum. In three o

* P. 13. † Ib.

‡ Manchester Society's Memoirs, vol.

¶ Brief View, p. 13. ‖ P. 1

he faculties were occasionally disturbed, but n general were unimpaired. "As in these 'cases," says Dr. T. "the injuries of the 'brain were accompanied with injury of the 'faculties, is it not a fair inference to say 'that, in the other cases, the tendency to in-'tellectual, was in exact proportion to the 'greatness of the corporeal injury†?" Cer-ainly not. From a great number of cases quoted by me, Dr. T. selects *five*, in *three* only of which some temporary læsion of the fac-ılties is mentioned. Even if I should throw hose three cases out of the question, the najority of positive facts, on which my ar-gument is founded, would remain totally un-njured. But in those three cases, the affec-ion of the faculties was by no means propor-ioned to the injury of the brain; on the contrary, the patients enjoyed their exercise, during the greater part of the disease. In the wo cases taken from Sir John Pringle, the nsensibility was a sign of the diminution of ife, but the faculties were entire, as far as

* P. 14.

the decay of life permitted the
which appears from the restora
clause Dr. T. had so uncandidly s

In the great body of evidenc
have produced, the proof of inte
intellectual powers, is full and de
this observation brings me to th
mark, in this curious piece of l
" nothing can be more loose and
" accounts of persons retaining
" ties till death *". Of the subseq
dry I disdain to take any notice,
observe, that an assertion of th
very surprising, when it comes fr
cal man. He ought to have kno
all cases of injury done to the brai
of the intellectual faculties is an ob
strictest attention, and is always p
mentioned in descriptions of such c
It is more surprising, that any ma
read should make such an assertio
collection contained in my Essay b

* P. 15.

Dr. T. pursuing his mirepresentations, makes me rest the proof of my general position, on a single case of Diemerbroeck's. Diemerbroeck says of a patient, under his own inspection, that after receiving a thrust with a sword through a considerable part of the brain, he talked for several days with his companions, properly, and with sound judgment, concerning different subjects. This account is neither loose nor vague. Dr. T. is therefore "obliged" to deny it, and to depreciate the writer's character. Diemerbroeck is certainly an author of credit: in relating what fell under his own observation, his authority has never been questioned *. He was a demonologist, like most of the physicians of his time. But men acquainted with medical literature, know how to distinguish between the errors of the age, and those arising from an author's own weakness. No one would refuse

* It is a curious circumstance, that Diemerbroeck mentions the efficacy of ink, externally applied to burns or scalds, which the late Mr. Hunter announced to the Royal Society, as the discovery of a Mr. Clark, of Edinburgh.

refuse a pathological fact, unconnected with demonology, from Dr. Hoffman, because he wrote his Essay, *De Diaboli Potentia in Corpora.*

But Dr. T. has not thought proper to reply to the case from Du Verney *, in which "the faculties were entirely unimpaired, till "death; *insomuch that some of his medical at-* "*tendants pronounced it impossible that the brain* "*should be injured:*" or to that from Petit (p. 29) where he asserts, that the patient's faculties were *perfect to the last:* or to Haller's expression, *etiam cum integritate mentis:* (p. 28) or to the case I have mentioned (p. 43) where the patient died, *in perfect possession of her intellectual powers.* If this be "loose and "vague" evidence, if these, and my other cases are not taken from respectable authorities,

Nil intra est oleam, nil extra est in nuce duri.

The hardiest of Dr. T.'s blunders occurs

* Argument against materialism, p. 34.

rs at p. 18, in which he denies that the ain was diseased, in some cases mentioned y me.

In one of them (p. 42) the brain was in a quid state: in another, "the whole sub- stance was *watery*, and so soft, that it would hardly bear the knife." In a third, be- des water in the ventricles, and an effusion f blood upon the tentorium, "there seem- ed to be a total change in the consistence and colour of the brain throughout. It would scarcely bear either handling or cut- ting, and the parts were uncommonly in- distinct." If Dr. T. supposes these to be ealthy states of the brain, he might have aved himself a great deal of trouble; for he night, with equal truth, have denied the ex- stence of disease, in every case which I had produced.

To finish his remarks, Dr. T. brings out an argument, which he had picked up from the Monthly Review; "that as long as the "sensorium

"sensorium shall continue, according to the "immaterialist, in a condition to be the in-"strument, the materialist will contend that "it may be the cause of thought *." I apprehend that the terms are by no means convertible here; at least, upon any theory of materialism hitherto stated. The facts which I have produced, destroy the mechanical theory of thinking; for in what mere machine can it be shewn, that every part, singly considered, is not essential to the functions of the whole? If the materialists, in consequence of my statement, choose to deny that the brain has any connexion with thought, that would be a very important change of ground, and it would remain to be seen, how they could support themselves in their new position.

The remaining part of Dr. T.'s pamphlet contains the common-place arguments against the doctrine of spirit, which require no notice from me. I have deemed it proper to vindicate

* P. 20.

vindicate myself against a series of most illiberal misrepresentations, but I do not think it necessary to go beyond the views of my original Essay.

Tum si quis est qui dictum in se INCLEMENTIUS
Existimavit esse, sic existimet,
RESPONSUM, NON DICTUM ESSE, QUIA LÆSIT
PRIOR. *Terent.*

FINIS.

BODLEIANA

MEDICAL HISTORIES,

&c.

MEDICAL HISTORIES

AND

REFLECTIONS.

VOLUME THIRD.

BY

JOHN FERRIAR, M.D.

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ASYLUM.

At nunc succincti quæ sunt bona disce libelli.
Martial. lib. ii. epigram 1.

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PREFACE.

The method pursued in the arrangement of my observations, of which I now offer a continuation to the public, has been so far understood and approved, that it is unnecessary to detain the reader, with any introductory remarks on that subject. But it may not be improper to explain, why some topics are unnoticed, which might, perhaps, be expected to have found a place in this volume.

I have

I have observed, that some of my readers have been disappointed, by the omission of well known facts, under some of my divisions. This arises from the nature of the work. I do not profess to write a systematic, or elementary book, which must comprise, or refer to every thing known respecting its objects. It is my intention to supply some deficiency in the history, or some elucidation of the treatment of particular diseases; and, writing for men engaged in practice, I suppose the general facts to be previously known.

On the subject of *Pneumatic Medicine*, I have been silent respecting

specting the *Gases*, because, after repeated trials, I am unable to convince myself, that they possess any remarkable utility. The noxious effects of some of them are sufficiently apparent; but experience proves, that it is unwarrantable to conclude from their power of destroying life, to their power of curing diseases.

The attention excited on this subject, however, has not been lost, whatever may be the fate of the theories, by which it was first introduced. The treatment of several diseases has been improved, by the free use of the nitric acid, which we owe to the happy talents

talents of Mr. Scott. He has completely succeeded, in rousing the Faculty to the employment of a powerful remedy, long, and unaccountably neglected.

The science of medicine would suffer equally, by an illiberal discouragement of speculative opinions, or by too ready an acquiescence in them. One would lead to a contracted, and degrading empiricism; the other, to a confusing, and pernicious versatility. But while we discuss new theories with candour, we should keep in view the memorable words of Hippocrates: that they, who, aiming at brevity, endeavour

to

to reduce the causes of disease and death to one or two, are liable to be misled in many of their opinions.*

* Περι Αρχαιης Ιητρικης.

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Of the Use of the Nitric Acid in the Lues Venerea, by the same 223

ERRATA.

Page 12, line 20, for adherens, read *adhærens*.

Page 159, and the running title, for nitric acid, read *nitrous acid*.

RABIES CANINA.

Τὴν σαφηνείαν.

MEDICAL HISTORIES

AND

REFLECTIONS.

RABIES CANINA.

Of all the monuments of medical superstition, none presents more strongly the characters of former ages, than the history of Rabies Canina. The horror resulting from its origin in the poison instilled by an inferior animal; from the mysterious symptom to which it owes its common appellation of HYDROPHOBIA; and from the dread (whether well or ill founded) of seeing it

it communicated by the unhappy patient to his friends and attendants, during his paroxysms, has caused observers to regard this distemper with a trepidation very unfavourable to enquiry. In the early periods of medicine, convulsive disorders of all kinds were considered with equal terror: epilepsy and hysteria were referred to the operation of supernatural powers, and practitioners became better instructed in their nature, only by the accumulation of facts, and the light of dissection.

In treating the first case of Rabies Canina which occurred to me, I felt all the disquietude resulting from the contradictory modes of practice recommended by authors on the subject. I have since met with another case of the same disease, but the patient died before I could see him, and I could only benefit by the opportunity of inspecting the body. The advantage of obtaining a second accurate dissection, in a disorder so obscure, led me to examine the accounts

counts preserved to us, of appearances after death, and the result of my enquiry has been an attempt to arrange facts, hitherto indiscriminately amassed. I shall first relate particularly my second case of hydrophobia, and then endeavour to conclude, from many similar observations, respecting circumstances hitherto overlooked, in treatises on this singular disease.

A man between forty and fifty years of age, was brought into the Infirmary, October 12th, 1796, from Gravel-lane, Salford, said to be affected with hydrophobia, in consequence of the bite of a mad dog. It was the sixth day of the disease. About six weeks before, he had caressed a strange dog, which came into the court-yard of his master's brewery; the dog bit him in the right thumb, and the wound bled considerably. He apprehended no danger, and took no precautions. On the sixth of October, he shewed a disinclination to swallow liquids, and in the opinion of the

the persons who were commonly with him, was generally in a delirious state. He complained of coldness when the door was opened, so that on the first and second day he imagined his disorder to be a sore throat, and even thought that his throat was externally swelled. The circumstance of the bite did not occur to his memory, till the day before his death, when one of the bystanders asked him whether he had ever met with such an accident. He was timorous, startled by all noises, and impressed with the belief that he was harrassed by witches, dogs, and annoyances of different kinds. Two days before death, he underwent several slight convulsive attacks. He never attempted to bite or injure any of the attendants, though it was often difficult to hold him during his frenzy.

The scar of the wound on his thumb was visible. It did not inflame, nor give him any pain previous to the attack, or during its continuance.

All

All these particulars I learnt from a very intelligent man, who had attended him, from personal regard, through the whole course of his illness.

Between seven and eight o'clock on the evening of October 12th, a hackney coach was sent to his house, to convey him to the Infirmary. It happened at the time to rain very hard. He hurried into the carriage with great impatience, seeming much irritated by being wetted, and observed, that had it not rained he would not have got into a coach. Upon arriving at the Infirmary gates, he insisted on walking through the garden, though evidently very uneasy under the falling shower. About half an hour after he entered the ward, he was seized with strong convulsions; a large quantity of ropy saliva flowed, for the first time, from his mouth, and he died before I arrived at the hospital.

Some hesitation was expressed by his family respecting the opening of the body,

body, and the inspection was delayed, to my great regret, till the next day.

Permission being at length obtained, the body was carefully examined in my presence by Mr. Simmons, on the 13th October; not quite twenty hours after death. The corpse was remarkably pale, excepting that the cheeks were somewhat livid.

On opening the head, we found an effusion of fluid between the pia mater and tunica arachnoides, which distended the former considerably. There was not more water than usual in each of the ventricles. There was a curious appearance of ossification on one of the peduncles of the pineal gland, and the gland itself contained sabulous matter.

On examining the thorax, there were some adhesions of the pleura covering the right lobe of the lungs, to that lining the ribs on the same side. The left lobe was so completely filled with blood,

blood, as to have acquired considerable weight and solidity.

In the abdomen, the liver was changed in colour, and streaked with white spots. The patient had been, I was told, rather intemperate. The external surface of the stomach was much inflamed, especially on the greater curvature. The œsophagus was completely sound. On opening the stomach, the villous coat was found to be generally inflamed in irregular points, and there was an appearance of abrasion, similar to that remarked in Johnson, my former hydrophobic patient. This inflammation did not extend beyond the villous coat, for on cutting into the muscular coat, it appeared quite sound. The affection did not reach to the pylorus.

The near resemblance of the appearances on dissection, in these two cases, led me to enquire whether the dread of water, in cases of Rabies produced by the bite of mad animals, had been

been accompanied by inflammation of the internal coat of the stomach or œsophagus in other instances: and from this enquiry, I was induced to take a more general view of the subject, and to examine how far the dread of water is essential to constitute the existence of Rabies; as cases are said to have occurred, in which neither this symptom, during life, nor inflammation of the stomach or œsophagus after death, had been observed.

Many cases of rabies are mentioned by authors, in which, upon dissection, the appearance of the internal vicera was found to be altered; but as they express themselves only in the general terms of *aridity*, or *dryness*, it is impossible to form an exact idea of the appearances.* Lieutaud mentions a case, in which the œsophagus was inflamed:† "Instituta sectione cadaveris,

* Lieutaud, Histor. Anatom. Med. tom. i. p. 369. Observ. 1552, p. 370, observ. 1552. (a.) P. 515, observ. 312. Id. tom. ii. p. 16, observ. 457. P. 81, observ. 727. Mead.

† Ib. tom. ii, p. 305, observ. 86.

cadaveris, cujusdam juvenis, post *morsum a cane rabido hydrophobia* sublati, inveniebatur œsophagus PHLOGOSI TACTUS. Tracheæ arteriæ facies interior nonnihil etiam rubens, nonnullas inflammationis notas præ se ferebat. Cystis fellea bile nigricante scatebat inculpato hepate. Cerebrum cum suis involucris, siccius et aridius videbatur quam solet. Vasa demum in qualibet parte sanguine fluidissimo turgentia annotabantur."* [Act. Paris.]

Dr. Hoffman mentions appearances still more nearly approaching to those which occurred in my cases.† "Digna est notatu observatio, quam tradit Cl. Zwingerus, Dec. 4, Ephem. Obs. qui in cadavere rustici hydrophobia secundo mense

* Non tantum œsophagus, sed et ventriculus, et intestina inflammata rubescebant in alio cadavere.
Hernand. rer. Mexic. Medic. Thesaur: quoted by Van Swieten.

There was Inflammation of the œsophagus, in a supposed case of hydrophobia, sent to me by Mr. Hoffman, which Dr. Lettsome has published in the appendix to Dr. Mease's treatise.

† Medicin. Rational. System. De Venenis, &c.

mense ob acceptum a rabido cane vulnus, correpti et extincti, in humero et scapula simistri lateris, ut et in reliquo dorso gangrænæ et sphaceli indicia observavit, in intestinis autem et stomachi tunicis, præcipue circa utraque ejus orificia, *maculas rubicundas*, ceu totidem inflammatiuncularum signa, thoracis cameram undique sanguine suffusam, et ex rubro livescentem, pulmonem inflammatum, interstitia membranosa circulorum asperæ arteriæ cartilagineorum intensissimè rubentia, diaphragma maximè circa costas inflammatum, in corde, vasis majoribus, et pulmonibus sanguinem concretum, et omni sero fluido destitutum invenit."

Dr. Hoffman has omitted a very important circumstance of this dissection: " Pulmo pleuræ adherens, concreti sanguinis molem referebat."*

" Quidam post aliquot menses *a morsu canis*

* Lieutaud, Hist. Anat. Med. tom. i. p. 445, obs. 39.

canis rabidi, manifesta *hydrophobia* corripitur, qua, variis incassum adhibitis præsidiis, e medio tollitur.

Inter cadaveris exenterationem, occurrit vesicula fellis bile nigerrima repleta, *pulmones conspiciuntur nigri,* & graveolentes.*

Van Swieten speaks of inflammation of the organs of deglutition, as a common appearance in the dissection of patients who die in this disorder.† He also mentions the liquid state of the blood, which has been observed by many other writers, but he does not acquaint us with the date of the respective dissections from the death of the patients, a circumstance which ought always to be mentioned in cases of nicety. He observes what is perhaps more important; the general state of the lungs: "Pulmones coacervato omni fere cruore incredibiliter plenos;" and its necessary consequence,

* Morgagni, apud Lieutaud, tom. i. p. 515, obs. 312.
† Commentar. tom. iii. p. 561.

consequence, polypous concretions in the heart, which are generally found in patients dying of peripneumony.*

In a young man, who died in consequence of the bite of a mad fox, with symptoms of Rabies, the fauces were found very much inflamed; the left lobe of the lungs was black, with the *vesicles*† full of black blood: the surface in some places, which the blackness had not covered, appearing blistered, as if raised by cantharides.

It must have been from observations of this kind, that a writer called by MANGET,‡ *Josephus ab Aromatariis*, supposed the Rabies to be a sort of contagious sore throat.

" Si on ouvre," says Sauvages," les cadavres

* Lieutaud, Hist. Anat. Med. tom. i. Læsiones Pectoris.

† This is the term used in the Narration. Philosoph. Transact. abridged, tom. v. p. 369.

‡ Bibliothec. Anat. p. 400.

davres de ces infortunés peu de tems après leur mort il s'en exhale une odeur très fètide; leur ventre est bouffi par les vents; leur estomac est farci d'une sanie verte; *on remarque dans leur œsophage des taches rouges,* tirant sur le noir; leurs veines sont pleines d'un sang dissous; leurs visceres sont secs et arides. D'après cela, il n'est pas etonnant que le malade ne boive plus pendant deux ou trois jours."*

In a case published by Bartholine,† the liver was found inflamed on the concave side, and adhering to the other viscera; the inner coat of the stomach had become so tender that it could be rubbed off with the fingers. The upper orifice of the stomach, *and the whole of the œsophagus,* were remarkably narrow, and appeared in a state of constriction. The internal surface of the œsophagus does not seem to have been examined.

It

* Nosologie, tom. ii. p. 702.
† Acta Danica, ann. 1682.

It appears from these facts, that the dread of water and of cold air, in cases of Rabies, depends on inflammation, and spasmodic affections of the œsophagus and stomach, which sometimes extend to the trachea, the liver, the pericardium, or the heart itself. It also appears, that the lungs are sometimes affected, in a manner hitherto neglected by writers on this complaint; that an effusion of blood into their substance takes place, similar to that which proves mortal in certain states of peripneumony. When this occurs to the dissector, it is unnecessary to look for any other cause of death.

But the aversion to water has not been found a constant symptom of Rabies, and it has frequently appeared as a symptom of other disorders. Hence have arisen the great confusion and obscurity of observations, which seem to encrease in proportion as observers have multiplied.

If

If the single symptom of aversion to liquids, and to cold air, be supposed to characterize Rabies, then several cases, in which patients have died from the bite of mad dogs, not only without having felt this symptom, but even suffering from extreme thirst, cannot be denominated canine madness; which is absurd. And on the contrary, many instances of common diseases, curable by common remedies, would be reckoned cases of Rabies, merely because the patients had felt an aversion to liquids and cold air, at some period of the disorder. Medical writers have chiefly erred in the latter mode.

HILDANUS mentions a case of Rabies, occasioned by the bite of a mad animal,* in which there was restlessness, nausea, anxiety, and tightness in the breast, and pains in the lower belly. Convulsions and delirium followed, and death took place on the sixth day: but there was no hydrophobia.

MEAD

* P. 365, observ. 88.

MEAD says,* "a learned physician has assured me, that in Shropshire, he saw three patients in one year, who, at the ordinary time of about thirty or forty days after the wound, all fell into such nervous disorders as have been described, a fever, delirium, palpitation of the heart, spasms, &c, and died on the third day: yet none of them, during this melancholy scene, had any difficulty of swallowing, or shewed any signs of a dread of liquids."

TULPIUS mentions a patient, who upon being attacked with Rabies, in consequence of the bite of a mad dog, complained of intolerable thirst: "torreri viscera, et præ fervido ardore, tantas intus excitari angustias, ut demorsus senex rejiceret modo stragula sibi imposita, modo vero exsiliret nudus e lecto: exclamans stentorea voce, ardentius sibi esse incendium, et urgentiorem sitim, quam ut posset ab homine tolerari.†

Sauvages

* De Venen. † Observation.

Sauvages says, it has been frequently observed, that animals seized with Rabies have no dread of water, and that they not only drink, but betake themselves to it and swim, without any reluctance.*

In the following instance, there seems to have been no aversion for liquids, in a rabid animal.

A sow, which had been bitten by a mad dog, was shut up and carefully observed. During five days the animal fed as usual; the sixth it was found standing with its head leaning on its food, and in this posture it remained three days. The tenth it was seized with a raging fit of madness: it foamed at the mouth: wandered backwards and forwards in the stable, and from time to time, knocked its head against one of the planks. The fit continued seven hours, after which the creature grew calm and lay down. *Mr. Beudon* seized this instant

* Nosologie, tom. ii. p. 700.

stant to employ his remedy. He let down, through the hole into the stable, a caldron, in which he had warmed four pots of strong vinegar: after which he stopped the holes in the stable, to prevent all communication with the outer air. In about an hour, his servant, who listened at the door to the motions of the animal, heard a noise which resembled drinking; and, upon examination, the sow was observed standing and drinking the vinegar with the greatest avidity: upon this, *Mr. Beudon* placed in the trough a quantity of bran moistened with vinegar, of which the day following nothing remained. This plan was followed by the complete recovery of the animal: the dog by which it had been bitten, and a small dog which had sustained the same injury with the sow, were treated in the same manner, and were both cured.*

It is evident, from these facts, that the term

* Histoire de la Societé Royale de Medicine, à Paris. Pour les années 1777, 1778.

term *Hydrophobia* is very improper, and it will soon appear to what confusion its use has given rise. The term βραχυποταα, from a word employed on some occasions by Hippocrates, is more truly descriptive of this symptom,* which consists in difficulty of swallowing, not in any aversion to fluids previous to the experience of this difficulty.

I proceed to shew, that many disorders, totally unconnected with Rabies, are accompanied with the βραχυποταα, and that several modern writers have been led by the term hydrophobia, to mistake an accessory symptom for a specific disease.

"This disease," says Dr. Mead, "should have been called Δυσκατάποσις, a difficulty in swallowing; rather than Ὑδροφοβια, a dread of water.

"It will serve both to confirm and illustrate

* Sauvages, Nosologie, loc. citat.

illustrate this reasoning, to take notice, that there are other distempers besides this, (and all, indeed, of the nervous kind) in which the same frightful symptom is sometimes observed. Authors have remarked it in malignant fevers; and a common melancholy has been seen to end fatally in it. I have known it, in the height of a violent hysteric disorder, to have continued for many hours, till the convulsive motions in the throat were quieted by proper medicines: and I remember a case, in which fits of a palpitation of the heart were attended with so great a degree of it, that it seemed not to differ from the true hydrophobia."*

It can hardly fail to surprise the reader, that so obvious a cause of difficulty in swallowing, as inflammation of the œsophagus, should have been so much disregarded by authors, while they have been eager to collect together the most transient

* Of the mad dog.

transient spasmodic complaints, affecting deglutition, under the title of hydrophobia. This mistake, I imagine, has been greatly owing to the want of dissections, in this disease. The opportunities are rare in themselves, and when they actually offer, the operator is sometimes timid, and unwilling to run the risk of infection, by exposing his hands to the contact of the salivary secretion.

It could not otherwise have escaped the notice of practitioners, that the symptoms attending the difficulty of swallowing, in cases of angina, of inflammation in the œsophagus, and of spasmodic affections, or more permanent irritation of the stomach, are readily distinguishable from each other, and cannot be conveniently referred to one general title.

But while the dread of water was supposed to be an essential circumstance of a disease beyond the reach of investigation, physicians were more disposed to

to rank other diseases under its standard, than to place it on its proper level.

Three cases of the accession of this symptom are quoted by Sauvages;* one from the *Journal de Medicine,* April 1766, where a difficulty in swallowing supervened to typhus; another from the *Miscellanea Curiosa,* where it accompanied the variolous sore-throat; and a third from the *Journal Encyclopedique,* where it is important to remark, that it supervened to peripneumony.

In reviewing Lieutaud's list of dissections, it will be found that difficulty of swallowing, in different degrees, has attended

* Nosologie, tom. ii. p. 705.

It would have been idle to have noticed some of these cases, if Sauvages himself had not quoted them under the title of Hydrophobia, and if it were not useful to shew the rage which has prevailed, for multiplying instances of this disorder, without regard to the very elements of pathology. Sauvages felt the inaccuracy which this disposition introduced, and very properly opposed it. But he did not go to the full extent of the question.

attended scirrhus of the stomach.* Boerhaave used to mention an instance, in which the difficulty of drinking, and consequent dread of water, accompanied a fever occasioned by heat and fatigue, joined to the abuse of spirituous liquor.† But the most remarkable cases of this nature are to be found in the Edinburgh Medical Essays,‡ where all the symptoms of *hydrophobia*, as it is usually understood, were produced by unusual irritation in the stomach, without the most distant suspicion of rabid poison. In one of these cases, the disease seems to have arisen from an accumulation of bile;

* Tom. i. p. 25. observ. 90, 91; et p. 27, observ. 96.

† Cel. Boerhaavius solebat hac occasione auditoribus suis affirmare, vidisse se lictorem, qui carnificem aliunde accerscere debuerat, ut publica de scelesto homine sumeretur pœna, incidisse in febrim ardentissimam, omnemque potum oblatum cum summo horrore repudiasse, & tertio die periisse: miser ille calidissima tempestate multum corpus moverat, deinde per quatuor horas nudato capite, solis radiis exposito, in scapha sederat, totaque hoc die, solo fere spiritu vini usus fuerat.

Van Swieten Comment. tom. iii. p. 537.

‡ Vol. i. p. 222 and 227.

bile; in the other there appeared to be inflammation of the stomach: in this latter case, the patient frequently spouted saliva from his mouth, and had all the horror at the sight of water which occurs in cases of true Rabies, where the difficulty of drinking has been experienced. Both these persons recovered.

Mr. Hoffman, surgeon to the King of Prussia, sent me the following case, in the year 1792. "Give me leave to mention to you a case of hydrophobia vera, without the bite of a mad dog. A man got cold, and had all the symptoms of pleurisy. He was bled, and treated upon the antiphlogistic plan: respiration however remained difficult, and the following day the patient could not take any fluid without falling into convulsions and tetanus. He was bled again, and a blister was applied on the whole neck, but the convulsions continued *with a constant discharge of saliva*, and he now attempted to bite every person who came near him. These symptoms continued

continued twenty-four hours, when the patient died. On dissection, all the vessels of the brain were found very much distended with blood, and in the sinus longitudinalis the blood was of a black colour, and nearly coagulated. The third ventricle of the brain was full of water. The diaphragm was inflamed in one part near the middle, and was throughout of a red colour. The liver had a gangrenous spot; the stomach was small and contracted; the intestines were much inflated with air, and in several parts inflamed; the upper part of the œsophagus was also a little inflamed. I think it is very clear, in this case, that the hydrophobia was entirely a symptom of inflammation produced by cold. The case is related by Mr. Thedon of Berlin."

But this symptom does not always arise from local irritation: Dr. Percival has justly remarked, in his letter to Dr. Haygarth, that the difficulty of drinking is sometimes produced by the power of imagination

imagination alone. I met with an instance of this kind lately, in which it was very difficult to prevent a person from rendering himself completely hydrophobic. Himself and his wife had been bitten by a dog which they supposed to be mad. The woman thought herself well; but the man, a meagre hypochondriacal subject, fancied that he had uneasiness in his throat, and that he could hardly swallow any thing. When he first applied to me, a medical friend, who was present, asked him whether he had any sensation of heat at the pit of the stomach. He answered in the negative, doubfully; but, next day I found him in bed, complaining of *heat at the pit of the stomach,* difficulty of swallowing, tremors, and confusion in the head. He continued to persuade himself he was ill of Rabies, and confined himself to bed, expecting death, for nearly a fortnight. At last, I remarked to him, that persons who were attacked by Rabies never survived more than six days: this drew him out of bed, and he

he began to walk about. By a little indulgence of his fears, this might have been converted into a *very clear case* of *spontaneous hydrophobia,* and the patient would probably have died.

The application of the term *hydrophobia* to an accessory symptom, supervening to such a variety of diseases, evidently tends only to mislead, by directing the attention of practitioners to supposed analogies, which have no other foundation than the abuse of a word. To be correct, we must preserve the distinction between Rabies, and diseases which are essentially different from it in their usual appearance, and which only acquire an adventitious resemblance to it under uncommon circumstances. Several cases have been described, of late years, under the title of *spontaneous hydrophobia.* I think it very evident, from the view I have exhibited, that no such disease ever exists.*

If

* This position has been maintained with great so-

If those cases be analyzed, they will be found to belong to the class of hysterical, febrile, mental, or spasmodic disorders, and by ranking them under their proper titles, we shall at once clear this subject from a great and accumulating mass of error. By considering the matter in this point of view, we are also enabled to explain the contradictory reports, hitherto so perplexing, on the effects of remedies in Rabies. It is easy to perceive, that evacuant and antispasmodic remedies would remove a difficulty in swallowing, occasioned by inflammation or spasm in the stomach or œsophagus; that bark and wine would cure it in cases of typhus, or of low mania; and that opium and the cold bath would be successful, when it accompanied tetanus.

When

lidity to a certain extent, by Dr. Mease, in his accurate Treatise on Hydrophobia, p. 6 to 11.

Dr. John Hunter had advanced a similar opinion, by way of conjecture, in his Observations on Canine Madness. Transactions Medical and Chirurgical, p. 302, 303.

When these false cases are set aside, perhaps we gain something respecting the *ratio symptomatum*, and the practice in Rabies. The difficulty of swallowing, in this disease, is probably almost always attended with inflammation of the stomach or œsophagus: we cannot, therefore, hesitate to bleed, and to apply rubefacients of the most active kind to the skin, as near the seat of inflammation as possible, whenever this symptom appears in a clearly-marked case of Rabies. It is of some advantage, that we can nearly ascertain the duration of the disease, for, if the practitioner be consulted early, he can determine with precision, whether a succession of blisters, or of stimulants quicker in their operation, be better adapted to the remaining portion of time. But the mode of applying these remedies may also be varied, by attention to the view of the disease next to be mentioned.

It has been remarked in many of the dissections, that the lungs have been loaded

loaded with blood, to such a degree, that some part of them has appeared almost a solid mass, exactly resembling the phænomena which occur, when blood has been effused into the substance of the lungs in pneumonic inflammation. The only question upon this point is, whether this happens so frequently as to constitute an essential part of the disease. I am inclined to suspect that it does. It is true, that in my first patient, Johnson, there was no particular disease visible in the lungs, which surprised me more, as he had suffered repeated attacks of pain in the breast and sides, and of cough, previous to the accession of the Rabies. But the appearance of effusion in my second patient was so striking, and the phænomenon is mentioned so frequently, without reference to theory, by authors, that it is allowable to direct the attention of practitioners to this circumstance.

This state of the lungs is obviously a sufficient cause of death, and when it is detected,

detected, affords a solution of our doubts on that head. If it be supposed, that congestion of the lungs takes place in the first instance, the affection of the brain, and the appearances of effusion or congestion discovered in it, receive also a full explanation. And that this supposition is not improbable, appears from the great anxiety and oppression at the breast, of which the sick so generally complain, which Dr. J. Hunter* supposes to depend on an affection of the heart, but which the review of dissections inclines me to refer to the lungs. Symptoms of compression of the brain are sufficiently remarkable, in the ordinary course of the disease, such as the delirium, and the convulsions, which are frequently of the epileptic type; but, in some cases, the appearances have been still more decisive. In a patient of Dr. Mead's,† a paralytic affection of the right arm supervened, and the patient complained of mist before his eyes. A patient

* Transactions Medical and Chirurgical, p. 307.
† Philosophical Transactions abridged, vol. p. 869.

tient of Dr. Howman's*, who was seized with Rabies in consequence of a recent bite, was affected, at the very commencement of the disease, with palsy of the right arm, and intermission of the pulse at the wrist of that arm. The difficulty of swallowing did not take place till the third night; and the paralytic complaint continued to encrease till death.

If future dissections should prove, that congestion in the lungs generally appears in those who die of Rabies, I confess that I should be disposed to consider this disease as dependent on the obstruction of circulation in that important organ. Accumulation of blood in the head, and compression of the brain, must be the consequence of such an obstruction, rapidly formed. The quick, panting respiration, anxiety and sudden debility, may be referred to the same cause. In fact, we find a similar degree

* Philosophical Transactions abridged, vol. v. p. 369.

degree of tremor attendant on the croup, which consists in inflammation of the trachea, and destroys by suffocation. That degree of inflammation in the stomach or œsophagus, which produces the difficulty of swallowing liquids, may not only arise from sympathy, but the symptom itself may occur in consequence of the state of the lungs alone. This will appear from the following case, given by Bonetus.

" Quidam voracissimus enteroceles molestias declinaturus, castrationi se submisit, feliciter peractæ. Omnia ritè se habebant, cum post tres septimanas *difficultate deglutiendi* et *difficili respiratione* prehenditur. Tertia die lingua erat carbone nigrior, urgebat deglutiendi et respirandi difficultas. Nil in hac anginæ specie, nec intus nec extra apparebat, si linguæ nigrorem exceperis.

" Mortui aperto corpore, salva reperta est trachea arteria, et omnis phlegmonis expers. Thymus intumuerat, et atro sanguine.

sanguine scatens tracheam premebat. Pulmones se præbent inflammati, et creberrimis maculis nigris conspersi cum gangrænæ signis evidentibus."*

It will appear, on reference to Lieutaud, under the title, *Læsiones Pectoris*, how frequently inflammation of the higher part of the abdominal viscera, accompanies pneumonic inflammation.

To all these considerations we must add, the suddenness with which death takes place, and the remarkable fluidity of the blood, so commonly observed in dissections; circumstances which cannot be satisfactorily explained, without attending to the state of the lungs, which I suppose to exist.

These conclusions, it must be owned, are uncertain, because the facts from which they are drawn are incomplete. I offer

* Lieutaud, Hist. Anat. Med. tom. i. p. 454, observ. 69.

I offer them only as conjectures, which may give a new direction to farther enquiries, on a subject equally important and obscure.

In the mean time, it cannot be uninteresting to consider, what mode of practice this view of the disease would determine us to adopt. Repeated blistering would certainly be adviseable, if the period of the disease should admit this remedy; and the application should be made to the head, as well as to the chest and spine. Blood should be drawn from the jugular veins, and perhaps the head and lungs would be best relieved by the repetition of bleedings. The state of the pulse, and the apparent degree of debility, should not deter the practitioner from using this remedy, on my supposition. Those symptoms may be considered as the necessary consequence of impeded circulation in the lungs. Dr. Nugent's case of Rabies was cured by large, and repeated general bleedings. In the present state of knowledge

ledge, little will be attributed to the musk which he exhibited. Great attention should undoubtedly be paid to the state of the pulse, while the blood flows from the vein, especially after the first bleeding. The same cautions apply here, which have been given by practical writers, on the subject of repeated bleeding in peripneumony. In fact, there is no disease which is accompanied by more striking marks of debility, at its first appearance, than peripneumony. If, however, the practitioner should be alarmed at the idea of frequent general bleeding, leeches may be applied to the temples. With the view of relieving the lungs from congestion, by stimulating the exhalents, and of extinguishing the existing disease, by producing another less dangerous, the success said to have attended the free use of mercury is perfectly reconcileable. I should join opium, in pretty large doses, with this process. Calomel with opium may be given internally, while the mercurial friction is applied to the limbs: I believe

believe that the mouth will be sooner affected in this manner; and, considering the short duration of the disease, it is of the highest importance to excite a ptyalism early.

So greatly would this hypothesis alter my views of the indications of cure, from opinions which I have formerly expressed, that it would induce me to prohibit entirely the use of the cold bath, and of bark, during the existence of the symptoms.

Respecting the use of oil, I should be more uncertain. Dr. Shadwell's case appears to favour it; yet there was something very unusual in that case, both in the mode of attack, which resembled phrenzy more than Rabies,* and in the duration of the disease; for eleven days elapsed from the first symptoms of illness, and nine from the phrenitic attack, before the difficulty of swallowing

* Memoirs of the Medical Society of London, vol. iii. P. 454.

lowing, and dread of cold air left the patient. If oil were given, I should not allow it to supersede the mercurial course.

As it is absolutely necessary to choose among the contradictory methods of treatment, recommended in Rabies, I have thus ventured to state the plan upon which I shall proceed, if any other cases occur to me; but with a deep conviction, that the grounds of preference are not yet sufficiently ascertained. This is a subject, concerning which the mind of the medical philosopher cannot remain at rest. It is allowable to hope, that careful dissections, and accurate discrimination of symptoms, will at some future, period afford the power of removing this hitherto intractable disease.

ACCOUNT
of
THE ESTABLISHMENT
of
FEVER-WARDS
in
Manchester,

— I have always thought it a greater happiness to discover a certain method of curing, even the slightest disease, than to accumulate the largest fortune; and whoever compasses the former, I esteem [him] not only happier, but wiser and better too.

SYDENHAM.

ACCOUNT OF THE ESTABLISHMENT OF FEVER-WARDS IN MANCHESTER.

In the two preceding volumes, I thought it incumbent on me to lay before the public, a view of the misery and havock, produced by the prevalence of infectious fevers, among the poor in manufacturing towns. A more agreeable task is now before me; it is, to explain the measures which have been adopted, in consequence of my representations, for remedying those evils, and the success attending the new institution, which has almost exceeded my warmest expectations.

Towards the close of the year 1795, an alarming infectious fever broke out at

at Ashton-under-lyne, which was supposed to have originated in the cotton-works of that place. Upwards of three hundred persons were attacked by it, in less than three months, and though the mortality was not great, a degree of terror was excited almost equal to that which the appearance of the plague would have inspired. I have been told that travellers were even afraid to pass through the town. The disease raged principally among the poor, and did not extend so much as was apprehended, into the houses of the more opulent. A committee was formed for the relief of the sufferers, and a subscription was raised for supplying them with medical attendance, medicines, and wine. An attempt was also made, to provide a house for the reception of fever-patients, but from the general prejudices of the sick, it was impossible to procure their removal from their own houses.

Mr. Ogden, surgeon at Ashton, enquired with great accuracy, into the origin

gin of this epidemic, and it appeared very clearly, that the whole mischief had arisen from the admission of a young woman from Manchester, into one of the rooms of the cotton-works, who had come from a house infected with fever, in this town. Mr. Ogden informed me, that he observed an eruption, which made its appearance on the fourth or fifth day of the fever, but without relieving the symptoms, and indeed without any evident effect on the course of the disease. I had seen something of the same kind about that time, in Manchester, but not so distinctly. The observation, may be worth recording, however, as I can place the firmest reliance on Mr. Ogden's report, and as he drew it from a great number of cases.

The attention and uneasiness thus excited, on the subject of fever, appeared to some gentlemen, who had interested themselves in my preceding details of the state of the poor, to offer a favourable occasion for forming a Board of Health,

Health, which I had proposed in the second volume of this work. Mr. Bayley of Hope, Dr. Percival, Mr. Meadowcroft, and several other gentlemen, requested me to draw up a plan for this institution, and appointed a meeting to receive the paper, and to begin a subscription for carrying the measures which should be recommended into execution.

A copy of this paper follows, which was read at a very numerous and very respectable meeting of the friends of the poor; among whom were several proprietors of large cotton-mills, who were desirous to use every means for preserving the health of the persons employed by them.

"To the gentlemen meeting at the Bridgewater-arms.

"Gentlemen,

"At the request of some of your number, who originally proposed this meeting, I submit to your consideration

consideration a few remarks towards the formation of a board, or committee, for superintending the health of the manufacturing poor, in Manchester and Salford. A principal object of this committee, must be that of diminishing the frequency of the epidemic fever, which has so often alarmed us in this place, which is now very prevalent in some parts of the town, and has spread itself to a very unusual extent in some of the neighbouring towns. The circumstances which produce and propagate this disease, seem to require more immediately the interference of a public body, and these once remedied, the general health of the poor must be greatly improved.

Having already published my sentiments pretty fully on this subject, I shall remark, without entering into any reasoning, that the principal sources of fever among our poor, are lodging-houses, cellars, cotton-mills, and the incautious intercourse of the poor with each other, in places infected.

1. Re-

1. Respecting lodging-houses, I have observed elsewhere, that the most desirable means of prevention would be to subject them to licences, which would bring them under the controul of the magistrate. At present, as the town is much less crouded than it was in 1792, the mischief arising from these houses is less; and until the committee can acquire the proper powers, it would perhaps be sufficient, to be at the expence of white-washing such as shall be reported to be infected and dirty, or when they are found to be over-crouded, to prevail on some of the lodgers to remove, which may be readily done.

2. The number of damp and very ill-ventilated cellars, inhabited in many parts of the town, is a more extensive and permanent evil. It may be necessary to explain to gentlemen who have not visited such places, that they each consist of two rooms under-ground; the front apartment of which, used as a kitchen, though frequently noxious by its

its dampness and closeness, is greatly preferable to the back-room: the latter has only one small window, which, though on a level with the outer ground, is near the roof of the cellar; it is often patched with boards or paper, and, in its best state, is so much covered with mud, as to admit very little either of air or light. In this cell, the beds of the whole family, sometimes consisting of seven or eight, are placed. The floor of this room is often unpaved: the beds are fixed on the damp earth. But the floor, even when paved, is always damp. In such places, where a candle is required even at noon day, to examine a patient, I have seen the sick without bedsteads, lying on rags; they can seldom afford straw. This deplorable state of misery becomes frequently the origin, and certainly supports in a great degree the progress, of infectious fevers. I have been able, in many instances, to trace the infection from cellar to cellar, and to say where it might have been stopped, by prudent management on the part of the

infected family. But it is likewise very difficult to eradicate the fever, when it seizes a family thus situated. It generally attacks them all in succession, and the convalescents, from their confinement in the midst of infection, have frequent relapses, attended with encreasing danger, so that the disease continues in the same spot, for several months together. The recovery even of those who do not relapse, is also tedious and imperfect, beyond the conception of any who have not experienced cases of this nature. The want of proper nurses must be added, as none of the least evils attending this unfortunate class of people. I have no hesitation in asserting, that many lives are annually lost, from this cause alone. It is extremely difficult, at present, to procure a nurse of good character, upon any terms, and it is often necessary to employ persons, on whom little dependance can be placed, that the sick may not be entirely destitute of assistance.

Great

Great advantages would therefore be derived, from removing the infected, and in some instances, perhaps, the whole family, from such dreadful habitations as I have described, into a clean, airy house, which should be provided by the committee, till their own cellars could be whitewashed, and sweetened by slaking quicklime on the floors. It is a question for the decision of the committee, whether they would prefer renting a house, or building a fever-ward for this purpose. I confess, that I should incline to the latter, for these reasons.

1. In the erection of a fever-ward, situation, air, and convenience would be better consulted: in renting a house, some of these very important objects might be unavoidably superseded.

2. Upon such a permanent establishment, one or more women of decent character might be induced to undertake the office of nurses.

3. By

3. By thus bringing the worst, and most neglected cases under one roof, the chance of spreading infection would be diminished, while attention to the patients on the part of the nurses would be better secured, than if the patients were dispersed in different houses, as, in reality, it would be very difficult to obtain a complete house, upon any rent, for such a purpose.

To explain this observation, I must beg leave to repeat a circumstance, which I have stated in my last volume of Medical Essays. Previous to the building of our Dispensary, when a patient happened to be seized with an infectious fever in the Infirmary, the disease was apt to spread to an alarming degree, so as to require a general dismission of the patients. But since a few rooms have been added to the Dispensary, for the purpose of secluding persons thus attacked, from the rest of the patients, though bad fevers have been accidentally introduced, yet by removing the patients, on the first

first attack, into the fever-ward, the disease has always been prevented from extending, without the necessity of dismissing a single patient. In like manner, I conceive, that by building a fever-ward in each of the Infirmary districts, and removing into them the worst cases from the worst houses, the progress of infection would be materially checked, and a great quantity of disease and mortality would annually be prevented. This plan would also give additional success, to the labours of the Infirmary physicians. It would add the chances arising from cleanliness, free ventilation, and careful nursing, to the efficacy of medicines.

4. In a separate building, the access of unnecessary visitors would be better prevented. It may give the committee a clearer idea of the extent of this danger, to mention, that an elderly woman, just recovering from the fever, informed me, that she had fifteen children, all settled in the town, and all of whom had undergone

undergone the fever within these two months.

In a building of this nature, it would be highly useful to have woollen dresses for convalescents, or persons belonging to removed families, that the clothes of the infected may be purified by stoving, or scouring. Shoe-baths would also be required for medical purposes, as well as for cleanliness.

It would be greatly to the advantage of the manufacturing poor, if the custom of wearing flannel next the skin were introduced among them. It would counteract, in many instances, the bad effects of cold and dampness, and would prevent many fevers and rheumatic affections. More frequent changes of apparel, which conduce to health as well as to luxury, might perhaps be procured to the poor, by encouraging the establishment of clothes-clubs, which some of them have begun to form among themselves.

In

In manufacturing towns, the attention of the poor is diverted from cleanliness, by the value of their time. To wash the linen of a large family appears hard labour, to a woman who can earn a subsistence by different employment. The mother of a family is, therefore, easily induced to let her children become very dirty, by the temptation of gaining money in a manufactory. Perhaps the distribution of pecuniary rewards to mothers, whose children shall be sent clean to the different manufactories, would produce a good effect.

What I now propose to the committee, can only be regarded as a measure palliative of the most urgent evils, for the best method of furnishing the poor with healthy habitations, which should effectually stifle the germs of infection, would be that of erecting small houses, at the public expence, on the plan of barracks, or cazerns, to be let at small rents, or gratuitously, according to the circumstances of the persons applying.

At

At present, perhaps, it would be most expedient for the committee, to try the effect of a single fever-ward, in some quarter of the town where infection more frequently prevails. In a town like this, such buildings can never become entirely useless, even if the plans of the committee should extend to the length, at which I have hinted. The want of proper sewers, in several of the streets, and the offal of slaughter-houses, left to putrefy before the doors in several places, are nuisances which deserve the serious attention of the committee.

3. On the subject of the propagation of infection in cotton-mills, it may be necessary to observe, that although it has been supposed, that fever may be imported in the cotton; and though this opinion does not seem improbable in itself, yet no direct proof of fevers originating from this source has ever been obtained. On the appearance of the present epidemic at Ashton, an alarm of this kind was spread, because the fever broke

broke out in the picker's room of a manufactory there; but I am informed, from very respectable authority, that the infection was actually carried thither from Manchester, by a girl, who went to be employed as a picker at Ashton. I apprehend that the mischief arising from some cotton mills, as they are at present managed, results from,

I. The custom of working all night;

II. Negligence in washing the floors and frames;

III. Negligence respecting the personal cleanliness of the work-people, and especially of the children;

IV. Imprudence in permitting convalescents, or persons coming from infected houses, to resume their work, with their clothes saturated with infection;

V. Want of proper ventilation, particularly

ticularly during the night-labour, when the air of the room is rendered additionally impure by the candles.

With regard to the three first articles, I am uncertain how far the committee could with propriety interfere. If the proprietors and overseers of manufactories could be interested in the views of the committee, very advantageous regulations might be formed.

The custom of working all night totally frustrates every attempt to ventilate the mills thoroughly; while the dirtiness of the persons employed, renders them more disposed to receive the infection of fever. This custom should, if possible, be discontinued.*

The other circumstances might be easily regulated by the overseers, who would perhaps be induced to pay more attention to them, if premiums were held out to overseers, who preserved a given

* See the second volume of these Essays for farther observations on the subject, p. 197.

given degree of health, among the persons under their care.

The remonstrances of so respectable a body, as a committee of this nature, may also be expected to have a proper influence, when they call the attention of the proprietors of manufactories, to practices evidently destructive of health and life.

The great difference in the healthiness of different cotton-mills, which it would be invidious to point out here, but which may be easily learnt from the lists of home-patients, kept at the Infirmary, for the last five years, sufficiently proves the benefits of care, respecting the circumstances I have mentioned, and the danger of inattention.

The re-admission of convalescents into manufactories, while they are in a state capable of infecting others, is an obvious cause of encreasing, and perpetuating fevers. To prevent this, it would be

be proper to retain patients in the fever-wards, till their clothes and persons should be sufficiently purified, and to caution the overseers of manufactories, against the reception of irregular patients, who might return to their employment, without leave from their physician.

A similar hazard, which arises from incautious visits to the sick, may be most effectually counteracted by regulations in the fever-wards. It would be cruelty to refuse access to near relations, in dangerous cases, but they might be taught to lessen the danger of receiving infection, by placing themselves between the patient's bed and the window, by averting the face while the patient speaks, and by carefully avoiding to sit down upon the bed.

All linen belonging to the patients, should be washed in the fever-wards, for the same reason.

The

The practice of smoaking tobacco has been sometimes recommended, as preventive of infection: whatever may be the effect of the herb, properly prepared, I am confident that the acrid, irritating composition, used by labouring people, is more likely to excite than to prevent disease; and I am persuaded, that I have seen complaints in the stomach and bowels, repeatedly occasioned by its use.

It would be very useful, if, among other important rules, contained in the report of the physicians respecting cotton-mills, published in 1784, that concerning the burial of the dead could be enforced. 'That the bodies of such as die of the disorder should be wrapped in pitched linen, and buried as soon as decency and propriety will permit.'

I have often seen interment unreasonably delayed, to the great annoyance of the survivors, and even of the neighbourhood.

The

The propriety of removing home-patients into the fever-wards, should be determined by the physician of the district; but as the system of the Infirmary is already very complex, I think all applications to the committee should come from the recommenders. Every kind of charitable relief administered to the sick, should be procured in the same manner; for we have found by the experience of last year, that when the faculty at the Infirmary are known to distribute money or other necessaries, the charity becomes oppressed by false claims, which intercept the expenditure and attention, due to real sickness.

The obvious extension of the cares of the committee, to a superintendance of the morals of the poor, as intimately connected with the preservation of their health, comprehends a variety of most important objects, which cannot be obtained, without application to the legislature of the country. Whenever that shall be deemed proper, it will afford me

me the greatest satisfaction, to communicate any remarks, which my professional intercourse with the sick poor has enabled me to make.

I have the honour to be,
gentlemen,
your very obedient servant,

J. FERRIAR.

Dawson-street,
Jan. 4, 1796.

It appeared to the board, that the most urgent object of attention, was the frequency of infectious fever; in consequence of which, resolutions were adopted, for establishing fever-wards, on the principles which I had laid down. A committee was then appointed, to fix on a proper situation for the purpose, and to form regulations for the conduct of the establishment.

That the nature of the rules may be better understood, it may be necessary to mention, that poor persons, ill of fevers,

vers, or other acute diseases, upon being recommended by a trustee of the Infirmary, are visited by the physicians at their own houses, within certain limits, under the denomination of home-patients. As the expence of furnishing medicines and wine, for this class of patients, was already undertaken by the Infirmary, the committee had only to provide a place for their reception, and to supply them with food and attendants.

The committee, after some deliberation, fixed upon four small, adjoining houses, situated without the wall of the Infirmary, and detached from other buildings. The medical gentlemen of the Infirmary expressed their opinion, that those houses might be fitted up in such a manner, that they might accommodate the necessary number of patients. It was calculated, that the expence of altering the apartments, and of furnishing them, would amount to 200 pounds, and that the annual expenditure,

ture, including house-rent, would be nearly 400 l. So moderate were the funds, with which we proposed to lessen the ravages of fever, in this great and populous town, where I have known upwards of three hundred fever-patients, at one time, on the Infirmary-list.

The calculation of the annual expenditure was founded on one, which had been made by Mr. Philips, the very active and intelligent Treasurer of our Infirmary, from the expences incurred, by the removal of two patients into the fever-ward, attached to the Infirmary, which I have mentioned before. The experience of seventeen months, which have intervened since the opening of the present fever-wards, has proved this calculation to be accurate. It was supposed that there would be fifteen patients, upon an average, in the wards, during the course of the year. The liberality of the town afforded a subscription, abundantly sufficient for the first demands of the establishment.

By opening communications among the upper rooms of the four houses, four large wards were formed, and each of the front rooms below being capable of containing two beds, we were enabled to accommodate twenty-eight patients conveniently: the following regulations were now drawn up by me, at the request of the committee, for the reception of patients.

Internal Regulations for the House of Recovery.

I. Every patient on admission, shall change his infectious, for clean linen; the face and hands shall be washed clean with lukewarm water, and the lower extremities fomented.

II. The clothes brought into the house by patients, shall be properly purified and aired.

III. All linen and bed-clothes, immediately on being removed, from the bodies

dies of the patients, shall be immersed in cold water, before they are carried down stairs.

IV. All discharges from the patients shall be removed from the wards, without delay.

V. The floors of the wards shall be carefully washed twice a week, and near the beds every day.

VI. Fumigations with nitre and concentrated vitriolic acid, which have been lately employed with such success in his Majesty's military and naval hospitals, as an antidote to contagion, shall be used, according to the directions of Dr. Smyth, twice daily in all the wards of the House of Recovery. The walls shall be frequently washed with quicklime, fresh slaked in water, and whilst it continues bubbling and hot.

VII. No relation or acquaintance shall be permitted to visit the wards, without a written

a written order from one of the physicians.

VIII. No strangers shall be admitted into the wards; and the nurses shall be strictly enjoined not to receive unnecessary visits.

IX. No linen or clothes shall be removed from the House of Recovery, till they have been washed, aired, and freed from infection.

X. No convalescents shall be discharged from the house, without a consultation of the physicians.

XI. The nurses and servants of the house shall have no direct communication with the Infirmary; but shall receive the medicines, in the room already appropriated to messengers from the home-patients.

XII. The committee of the Strangers' Friend Society shall be requested to undertake

dertake the office of inspecting the House of Recovery.

XIII. A weekly report of the patients admitted and discharged, shall be published in the Manchester news-papers.

XIV. When a patient dies in the wards, the body shall be removed as soon as possible, into a room appropriated to that use; it shall then be wrapt in a pitched cloth, and the friends shall be desired to proceed to the interment, as early as is consistent with propriety.

XV. All provisions and attendance for the patients in the House of Recovery, shall be provided from the funds of this institution, without any communication with the Infirmary.

The rooms on the ground-floor were appropriated to the servants, and the convalescents. The establishment of servants, consisted of a head-nurse, who was expected to superintend the domestic

tic concerns of the house, and three ordinary nurses, a number supposed to be equal to the general exigencies of the institution. On emergencies, it was proposed to hire occasional nurses, while the temporary pressure might render their assistance necessary. The wards were furnished with iron bedsteads, without curtains, and with ticks filled with straw, which was changed at proper periods.

The mode of removing the sick from their own dwellings, adopted by the committee, was that of conveying them in a sedan-chair, purchased for the use of the fever-ward, and kept in the outbuilding, for that sole purpose.

Part of a vacant piece of ground, adjoining to the houses, was enclosed with a wall, for the purpose of washing and airing the clothes of the patients.

In this state, the institution was opened, May 27th, 1796, under the denomination of

of the *House of Recovery*, a name which some members of the committee supposed would be less alarming to the feelings of the poor, than that of *Fever-ward*. Some reluctance was apprehended on the part of the patients, from the example of Ashton, but I experienced very little of it among the first objects whom I selected, and as soon as the nature of the institution became understood, by the report of those who were discharged, it acquired universal popularity among the poor.

At the opening of the *House of Recovery*, though fevers were not remarkably prevalent in Manchester, the weekly list of home-patients was rather encreasing. In a few weeks, it was reduced to one half of the usual number, and it has never since risen to the former height, notwithstanding the addition of a new class of patients, which I shall soon mention. The most satisfactory evidence on this subject, is afforded in the following report,

port, from the Weekly Board of the Infirmary.

"The Weekly Boards having observed with great satisfaction, the remarkable diminution of the number of home-patients, in the lists laid before them every Monday, since the opening of the HOUSE OF RECOVERY in May last:—This Board thinks it may be proper to inform the public, that cases of Fever, in particular, have been still less frequent than might be supposed from a cursory inspection of the lists. It is obvious that the number of home-patients weekly admitted, is not, upon an average, more than half the number admitted previous to the opening of the HOUSE OF RECOVERY; but it appears from an inspection of the physician's books, that the proportion of fever-patients, out of the whole number of patients, is much smaller than formerly: thus, on comparing the home-patients, admitted in January 1796, with those of the last month, it appears that in January 1796, the

the whole number of home-patients was 296, out of which 226 were cases of fever; but in January 1797, notwithstanding the severity of the season, the number of home-patients was only 161, out of which 57 were ill of fevers.

It must be farther considered, that for several months past, the BOARD OF HEALTH has agreed to admit patients in fevers, to the HOUSE OF RECOVERY, from beyond the districts, and *one third* at least of the number which appears on the books must be accounted for from this regulation, by which the environs of the town are cleared from epidemic fever. Making the deduction of this extraordinary class of patients, it is evident that the frequency of fevers has been reduced in a surprising degree.

Another important consideration, which suggests itself to the observation of the Board, is, that during the great alarm and distress, occasioned by epidemic fevers, the claims of patients labouring

bouring under them supersede almost all others on the attention of the Trustees; so that scarcely any other cases of disease have been admitted at such times.

Those who will take the trouble of looking over the lists of diseases in the Physician's books, will be greatly struck with the difference, on seeing the variety of complaints entered within the last half year. Thus the benefits of the charity are more equally extended, than when the Infirmary and the town were oppressed by the enormous croud of fever-patients, which was pouring in upon them, before the means of removing fever-patients were provided."

It was soon found, that the removal of patients, residing within the Infirmary districts, was but a partial measure for checking the progress of fever. Many narrow and crouded streets had been excepted from the visits of the physicians,

cians, on account of their distance, or had arisen beyond the appointed limits, during the rapid encrease of the town, previous to the war. It was impossible to cut off the communication between infected persons, situated beyond the districts, and their connexions within them, especially as the division, in some streets, which extend in a straggling manner into the country, is an imaginary line. Those extremities, therefore, remained, as nurseries of the disease, and it became absolutely necessary to remove patients into the House of Recovery, from any distance, whence they could be conveyed in the sedan.* In adopting this resolution, the committee had to consider, that by the rules of

* As the physicians of the Infirmary cannot visit patients thus circumstanced, intelligence respecting the nature of the complaint is obtained, either by means of some medical practitioner, who has seen the patient, in the first instance, or from the physician's clerk, when the distance is not great, or by good information from the neighbourhood. There is little room for deception. The hardiest vagrant would shudder at the idea of entering a fever-ward, when affected with any other disease than a fever.

of the Infirmary, no medicines could be dispensed from that charity to patients thus circumstanced. They, therefore, agreed to indemnify the Infirmary, if required, for the expences incurred, by introducing patients from beyond the limits; but the general saving to the Infirmary has proved so considerable, by the diminution of fever-patients, that, I believe no demand of this kind has ever been made upon the Board of Health.

Not long after the opening of the House, I had a strong proof of its salutary effects. I was requested by the proprietors of a large cotton-mill, within a mile of Manchester, to inspect the state of the persons in their employment, and to examine into the circumstances which had produced an epidemic fever among them. Nothing appeared in the factory itself which could occasion disease, but when I came to examine the adjoining village, in which the people resided, it was evident that causes of fever, similar to those which operated

ed in Manchester, subsisted there. Several dirty families, who had contrived to make even new houses offensive, received lodgers, without regard to convenience in their accommodation; cellars were inhabited; and almost every house was over-crouded. The existence of infectious fever, which now appeared for the first time among them, was traced to the settling of a family in the village, who had suffered much from the typhus in Manchester, and who had probably carried with them infected clothes or furniture, as one of them was only in a state of convalescence at the time of their removal. I immediately caused several patients to be carried into the House of Recovery, and recommended that the lodging-houses should be cleared of their superfluous inhabitants, that the vapour of the nitric acid should be extricated in them, and that some families, who seemed incurably dirty from long habit, should be dismiss- from the place. These proceedings checked the progress of the disease for some

some days, but as one or two patients had objected to their removal to the fever-ward, it broke out again, and I was obliged to order eight patients, in different stages of fever, to be removed in one day. The situation of two of these was deplorable. Their parents had been swept off by the disease, and as great terror prevailed in the neighbourhood, these little wretches were left, unknown to the proprietors, almost destitute of every thing. One of them died from the effects of previous hunger, very soon after its reception into the House of Recovery.

Since this second removal of patients, the village has been perfectly healthy, during nine or ten months.

It is none of the least advantages consequent on this institution, that the owners of cotton-mills have been instigated, by the facts brought before them, to pay a more scrupulous regard to the health of their work-people. The buildings

ings are in general kept cleaner, and are better ventilated than formerly, and in most of the large cotton-mills, the persons employed are not exposed to more numerous causes of disease, than any other class of labourers, excepting in the process of *mule-spinning*. There, indeed, it happens unfortunately, that the work-people fancy an extraordinary degree of heat to be necessary, which, when accumulated in close rooms, whither it is conducted by flues, proves highly injurious to health. But this is the error of the servants, not of the masters, some of whom shew great anxiety to correct it.

I can also perceive, that a salutary impression has been made on the minds of the poor, respecting the utility of cleanness in their houses. The idea of fever comprehends, among them, that of ruin to their circumstances, and desertion by their neighbours: it may, therefore, be expected, that they will catch at every means within their reach

to

to avoid so dreadful an evil. When they find that a public charity extends its care for them so far, as to white-wash their houses, when the physicians report it to be necessary, they must feel the propriety of attending more to this object.

It is true, that many causes of fever, and other disorders remain yet untouched by this institution. To render the labouring part of the community more healthy, no method will be sufficient, but that of providing public lodging-houses, well-regulated, for their accommodation. This would be a very arduous task, yet I am not without hopes that it may, at some future period, be accomplished.

The reader may have observed, that I had proposed to establish fever-wards in different parts of the town, in the paper laid before the committee; this appeared, at first sight, to be the easiest method of disposing of the patients; but from

from our experience of the present plan, I am persuaded that every purpose may be answered, by removing patients to the present situation. It may, and it probably will become requisite, to enlarge the present buildings. The accommodations are sufficient for the extent of the town at this time, but upon the revival of trade, and a consequent accession of new inhabitants, epidemics may occur, in which it may be necessary to provide beds for a more considerable number of patients. A building capable of containing fifty patients, would probably be adequate to every emergency. Some rooms ought to be set apart, for the occasional reception of patients affected with Scarlatina Anginosa, which makes dreadful havock, when it rages among the poor, and for admitting patients in measles and small-pox. The latter is a disease particularly destructive, among the lower class of inhabitants here, as they entertain strong prejudices against the practice of inoculation, though the

benefits of it are offered to them twice a-year, at the Infirmary.

The success of the practice in the House of Recovery, has been very considerable. The following extracts from the last report of the Board of Health, will shew, as clearly as I could offer it to the reader, what have been the advantages attending the institution.

"COMPARISON *of the* Number *of* Patients *ill of* Fever, *admitted on the* Physician's Books * *at the* Infirmary, *at different periods, in Portland-street, Silver-street, and the other streets in that pile of buildings, in the neighbourhood of the* House of Recovery.

From

* When a home-patient, has been recommended, and has been visited by a physician, his name, place of residence, age, the name of his disease, and that of the recommender, are entered in the books kept by the physicians' clerk; the number of prescriptions, and the event of the disease, with the dates of the admission and discharge, are likewise registered in them, with the greatest regularity: so that they afford authentic information, respecting those subjects.

From September 20, 1793, to May 20, 1794, (a period of *eight months*, selected on account of the usual prevalence of fever) number of fever-patients in these streets, 400.

From September 20, 1794, to May 1795, number of fever-patients in these streets, 389.

From September 20, 1795, to May 20, 1796, number of fever-patients in these streets, 267.

From July 13, 1796, to March 13, 1797 (being a period of *eight months* since the opening of the House of Recovery), number of fever-patients in these streets, 25.

In July last, five.

In August last, one.

In September last, none.

From

From the 4th to the 23d. of February last, two.

The bills of mortality for 1796 shew, that there has been a decrease in the burials, amounting nearly to 400.*

From the opening of the House of Recovery on the 19th of May, 1796, to February 3d, 1798, 623 patients have been admitted: of these 53 have died; 15 remain in the house. The number of deaths, since the beginning of May, 1797, to Feb. 3, 1798, has been only 13, though the House has been generally full, during the whole period. The most striking proof of the benefit which the public derive from this institution, results from observing the diminution in the number of the home-patients of the Infirmary: the number of home-patients, from June 1795, to June, 1796, was 2880; from

* "On referring to the physician's books this day, July 30th, 1797, it appears that there has been only one fever-patient in these streets, during the last three months."

from June, 1796, (immediately after the opening of the House of Recovery,) to June, 1797, the number of home-patients was 1759; that is, the illness of 1121 persons has probably been prevented by this institution, in one year; for the home-patient's list has generally encreased every year.

To this I can add, that when we were threatened with a return of the epidemic, one hundred and forty-nine persons were received into the House of Recovery, from the beginning of May, 1797, to the beginning of October, and of these, four only died, though, in many instances, the dangerous nature of the fever was the motive for removing the patient.

But many of these facts, and the arguments in favour of such institutions, have been so ably stated by Dr. CURRIE, of Liverpool, in his late publication, that it is unnecessary for me to proceed farther on this part of the subject.

The

The situation of our House of Recovery, is particularly favourable to a more frequent attendance on the patients, most of whom it was previously impossible to visit more than once a-day, while they were dispersed through all parts of a great town. In dangerous cases, they are now visited twice or thrice a-day, and are furnished with night-watchers; in a word, every efficient attention is paid to the poorest, and most friendless objects in our wards, which money and influence can procure for the most opulent individual.

The number of cures effected in the House of Recovery, must be principally ascribed to the attendance, and the comforts experienced by the patients. A clean bed, a quiet ward, an attentive nurse, and the frequent visits of the physician, are so many medicines to a poor creature, who has been languishing in a cold, damp cellar, or in a garret exposed to the injuries of the weather, amidst the neglect and confusion of a wretched

wretched family, clamorous from hunger, or brutal from debauchery.

In the practice of the House there is nothing peculiar, excepting the use of cold bathing, which I introduced among the home-patients in 1791, and which I have employed very successfully in the fever-wards. I have not used it in the first days of fever, as danger is frequently to be apprehended from the tendency to congestion, particularly in the head. Perhaps the scrophulous constitution of a large manufacturing town, may render suppuration in the brain more frequent, in situations resembling ours. The severe cough, which so often attends our synochus and typhus, from their first appearance, also strongly contra-indicates this practice with us, at the beginning of the disease.* But when the fever runs on

* I observe with great satisfaction, that Dr. Currie's experience of this remedy, and my own, illustrate each other. He has clearly established its utility at the first accession of fever; and I have found it invariably safe and salutary in the more advanced state of the disease, when

on to a great length, without any particular affection of the head or lungs, when common stimulants lose their effect, and when the extreme debility of the patient takes away all hope of restoring him by ordinary means, I find the cold bath eminently serviceable. Among the home-patients, I was frequently under the necessity of employing simple ablution with cold water, from the want of conveniences: in the House of Recovery we use the slipper-bath, and immerse the patient. I have never known any injurious effect produced; on the contrary, patients have often declared, that they felt themselves agreeably refreshed by it. In some cases, where great stupor accompanied the other bad symptoms, and where I was not without suspicions respecting the state of the brain, I have yet ventured on the use of the cold bath, after applying

when he generally declined employing it. Perhaps, from difference in situation and employments, there may be more tendency to partial congestion, in our epidemic, than in that of Liverpool.

applying leeches, or cupping-glasses, to the temples, and I have had the satisfaction of seeing the patient recover, from a state little short of death. Immersion generally brings on very quiet and salutary sleep, in the course of an hour or two. One of my patients, in whom the effects of the bath appeared to go off towards evening, was bathed twice a-day. The patients' drink is commonly administered cold.

In cases of typhus, which begin with diarrhœa, when the stomach becomes so irritable as to reject medicines, wine, and other kinds of sustenance, I depend on repeated doses of opium in substance, sometimes combined with aromatics, frequently given alone. I have cured several cases of this kind, when the fever run on for four or five weeks, without giving a single dose of bark. In these circumstances, when there is no fixed pain in the bowels, I join the use of the cold bath with that of opium, with great advantage. Astringent

tringent glisters, administered cold, have a powerful effect in checking febrile diarrhœa. In one case, when large quantities of laudanum thrown up, combined with strong astringents, were instantly returned, and small loose stools were discharged almost every half hour, I directed three ounces of a strong decoction of galls to be injected cold; the effect was, that the patient had no return of diarrhœa for four hours, and then parted with a figured stool. The nausea, which is always a formidable symptom, may sometimes be relieved by giving, repeatedly, small quantities of milk and water; in general, it yields to the use of opium, and burnt brandy. I find, that obstinate costiveness, which sometimes becomes as troublesome as the opposite state of the bowels, is best relieved by calomel. Five or six grains commonly operate very gently with an adult, in this state.

When patients are admitted into the House, a flannel dress is provided for them

them, and their own clothes are carried into the yard, to be washed, scoured, or ventilated. During their convalescence, they wear the dress of the house; which consists of a jacket and trowsers for the men, and of a wrapping gown and petticoat for the women. At the time of discharging patients, their own clothes are returned to them perfectly clean, and they rejoin their families, and resume their occupations, without the hazard of communicating infection to others.

Institutions of this nature are particularly adapted to manufacturing towns, but, I believe, there is not a town in the kingdom, containing four thousand inhabitants, which would not be greatly benefited by similar establishments. Abuses and errors prevail every where among the lower classes of society, which require both instruction and assistance from the more enlightened. Much misery, much actual suffering, are unavoidable in all states of society, yet when

when the important interests of the poor are properly watched over, their calamities admit of great alleviation. The facts detailed in this paper have been collected, to shew by how simple a method, and with how slight an expence, one of the chief scourges of mankind may be disarmed of a great part of its terrors. Other towns, I trust, will perceive it to be their interest to adopt measures of the same kind.* Reliance may be placed on our experience here, for I have been less desirous to celebrate the triumph of art, than that of humanity.

* In April last, I was requested, by several of my friends in Stockport, to furnish a plan for establishing a fever-ward in that populous town. The design has been pursued with great spirit, and a sum has been raised, sufficient to enable the Trustees to erect a building for the purpose. The same general causes of fever exist in Stockport, which render the disease so common in this town.

AN AFFECTION
of the
LYMPHATIC VESSELS,
hitherto misunderstood.

OF AN AFFECTION OF THE LYMPHATIC VESSELS, HITHERTO MISUNDERSTOOD.

It has been long known, that irritation may be propagated along a lymphatic vessel, from its extremity, to its entrance into one of the larger conglobate glands. The vessel can be distinctly traced in its course, by its hardness and enlargement, and frequently by a slight inflammation of the superincumbent skin, forming a red, or purple streak, and extending with the affection of the vessel. But practitioners do not seem to be aware, that all the lymphatics of a large limb may take on a disposition to inflammation, from internal causes, though such an occurrence might have been expected, *a priori*. The following case

case appears to me to demonstrate this fact, and to furnish an explanation of cases, which have been described, but I think not well understood, by former writers. It will serve, also, if my view of it be correct, to direct our practice, in circumstances where little has yet been attempted.

A gentleman of an irritable habit, subject to severe bilious attacks, to hæmorrhoidal discharges, and sometimes to a considerable degree of rheumatism, was affected with pain, stiffness, and swelling, in the left leg and thigh. The pain and swelling began in the foot, and extended up to the groin. When I saw him, the swelling was uniform, tense, and shining, without discolouration of the skin. Upon applying my hand, I felt great hardness and enlargement in the glands of the groin, and in those of the ham; the patient complained most of pain in the ham. The vessels could be felt much enlarged and hardened, for a little way above the ham, but the extreme

treme tension of the skin prevented me from tracing them to any considerable distance.

A bilious fit had preceded this attack, and the stomach was still weak, full of flatulence, and easily excited to vomiting. The patient had also been exposed to the action of cold and moisture.

About two years before, this patient had undergone a variety of complaints, arising from an accumulation of bile, and had discharged a considerable quantity of hæmorrhoidal blood. After this, the left arm had become swelled and painful, but not to a degree equal to the disorder which I have described. The disease in the arm was at that time removed, by the application of a blister below the elbow-joint. After the disappearance of the swelling, an acute pain in the right side supervened, accompanied with tension of the abdomen, and obstinate costiveness. These symptoms continued with great severity, during

three days, and were carried off by the brisk action of senna and rochelle salt.

In considering the affection of the leg and thigh, I conceived that there were sufficient marks, to indicate a general inflammatory state of the absorbents of the limb. Those symptoms, from which we conclude a single lymphatic to be inflamed, were distinguishable in all the superficial lymphatics, and in the conglobate glands of the part. I determined, therefore, to try the effect of topical bleeding, and I directed several leeches to be applied to the leg, just under the knee, as the pain and stiffness were most considerable in the ham. Almost immediate relief was obtained from the action of the leeches. Next day, there was an evident decrease of the swelling, and I could distinctly trace the superficial lymphatics, entwisted like bundles of cord, through the whole course of the limb. The inguinal glands on the left side were still much enlarged, and very painful, but the affection seemed to stop there,

there, for no pain or distention was felt in the abdomen.

The disease gradually lessened from day to day, while the patient's bowels were kept open by gentle cathartics, and in the course of a week or two, little inconvenience remained.

When I first apprehended the nature of the complaint, I felt great anxiety, lest the inflammation should extend to the absorbents in the internal cavities. Fortunately, the inflammation of the inguinal glands stopped the extension of the disease. This event may be accounted for, on two different suppositions. The severe irritation of those glands might extinguish the degree of inflammation, previously subsisting in the vessels, as a blister applied to the skin would have done; or the inflammatory disposition might be exhausted, by its extension to the inguinal glands, and by the violence of its action upon them. The latter supposition appears more

more probable; for the inflammation of the glands in the ham, though very considerable, did not terminate, however it might lessen the affection of the vessels; and we know, from the effects of wounds of the absorbents, that the vessels themselves are generally incapable of secreting pus, or of producing inflammatory exsudation, though the conglobate glands suppurate, like other vascular parts.

The tenses welling of the limb, clearly marked the distinction between the class of vessels affected, and those of the sanguiferous system. The absorbents were rendered incapable of performing their functions, by the thickening of the vessels, and the obstruction of the glands; but the arteries being in a sound state, the exhalents continued to pour out their fluid, which, not being absorbed, must stagnate in the cellular membrane. The theory and the fact accord perfectly with each other. The difference between this state of accumulation, and that of common dropsy, seems

to be this, that when the lymphatics are generally inflamed, absorption ceases entirely, for the time; but that in cases of œdema, or anasarca, absorption goes on, though imperfectly, while there is any vigour in the habit. At length, absorption is stopped, in dropsical cases, and the integuments give way; but before this event takes place, I have generally found the swellings assume the tense, shining appearance, accompanying the lymphatic inflammation.

It is impossible to avoid indulging some reflections, upon an occurrence which seems to open new views in pathology. Our recent acquaintance with the absorbent system, has inspired a just diffidence, respecting its general influence on the doctrine of disease; and the care taken to discriminate the functions of this system from those of the heart and arteries, has, perhaps, occasioned a belief, that they have fewer properties in common than farther observation will ascertain.

The

The case, which I have detailed, appears, in some respects, to meet Dr. Latham's ideas on the subject of rheumatism, and if it were allowable to dedominate a *species* from a solitary fact, this might be called *Lymphatic Rheumatism.* But this very fact shews, that inflammation of the lymphatics produces very different symptoms, from inflammation of the muscular fibre, which constitutes acute rheumatism, and of which the existence has been ascertained by dissections. The pain, in lymphatic inflammation, is referred to the enlarged glands, and is not remarkably encreased by motion; there is more stiffness than actual pain throughout the limb; the swelling is general, and the skin is not discoloured. But although acute rheumatism sometimes affects the greater part of the external muscles, it occasionally appears in a very limited sphere. A single muscle may be attacked by it, independently of the others. I once saw it confined to the belly of the biceps muscle, of the arm.

Perhaps

Perhaps this observation may serve to elucidate the curious cases of limited muscular pain, which Mr. HOME has given in the Croonian Lecture. Much, indeed, must be allowed for the state of debility, under which some of his patients seem to have laboured. I remember, that when recovering from a severe typhus, about eighteen years ago, if I happened to stretch my arm or leg, inadvertently, to the full extent, an acute pain was produced in all the muscles employed in the action, though in ordinary motion, there was no uneasiness felt in any of the limbs.

I see no reason for supposing, that this affection is necessarily confined to the extremities, particularly to the lower limbs. The causes which produce inflammation of the lymphatics in one part of the body, may occasion it in the same order of vessels, when applied to them in any other part of the body. One circumstance, indeed, must be admitted, to render the extremities more frequently

ly liable to such an attack. The great number, and the size of the superficial lymphatics in the extremities, particularly in the lower, may encrease the probability of their undergoing this affection. I suspect, that it is a disease not unfrequent in irritable habits; but that hitherto, the enlargement of the glands, and the general swelling, have drawn off the attention of practitioners from the situation of the vessels. What symptoms attend inflammation of the absorbents, in the cavities, we are yet to learn, unless, as I suspect, the complaint mentioned in p. 97, proceeded from this cause. It is not impossible, that encysted dropsies may arise from complaints of this nature. Ascites is sometimes preceded by internal pains, which are vaguely referred to the stomach. The inflammatory disposition may be fully exhausted, among the numerous glands of the mesentery, without extending to those of the groin; and the slowness with which the swelling disappears, affords sufficient proof, that the absorbents

bents do not readily resume their functions, after the inflammation has subsided.

It is also not improbable, that in different degrees, and under circumstances somewhat different, affections of this class may lay the foundation for scirrhus in the mesenteric glands, and for atrophy. The inflammation of the lymphatics does not seem, in its first tendency, very dangerous. By the pain which it produces, it stimulates the arterial system, and a farther cause of irritation may be found in the accumulation of the fluid effused by the exhalents; but, independently of these circumstances, there does not appear to have been any direct sympathy between the sanguiferous and the absorbent systems, in this instance. Yet the absorbents are known to assume an inflammatory disposition, in consequence of diseases in vascular parts. The irritation of a chancre, or the excoriation of the glans, by the discharge in gonorrhœa, will inflame the lymphatic

lymphatic vessels, and even the glands in the groin. It has occurred to me, that the view which I have taken of this subject, may explain a singular fact, which has not yet been satisfactorily accounted for. It frequently happens, that in a virulent gonorrhæa, the surface of the glans becomes completely raw, and is constantly covered with the infectious discharge, yet the habit is not infected, though the disease continues for several weeks, and though mercury is used sparingly, or not at all. In these cases, I believe it uniformly happens, that the lymphatics on the sides of the penis inflame, become hard and enlarged, and that there is a painful enlargement of the inguinal glands, on one or both sides. It seems probable, that in consequence of their being thus affected, the vessels lose their power of absorbing, and that the noxious matter is denied admittance into the system. This may be one of those regulations of Providence, (which physicians have thought proper to call the *αυτοκρατεα*) for preventing

ing the introduction of poisons into the circulating system.

In the case of chancre, when the ulceration has once taken place, infection is unavoidable, because by the laws of the system, every ulcerated surface is an absorbing one.

By the theory which I have suggested, several problems in the history of venereal complaints may be resolved. If absorption of the contagious matter be prevented, by the inflammation of the absorbent vessels, and by inflammation propagated to the glands from those vessels, it will be easy to conceive, that infection of the habit will not take place under such circumstances; that mercury may exert an action unfavourable to the disease of the lymphatics; that the pus secreted by the suppurated glands may not be capable of communicating a specific disease; and that in buboes, thus produced, the process of healing may be as slow, as in any scrophulous abscess.

The

The lymphatic system appears to be particularly affected in the plague. Enlargement, and painful induration of the conglobate glands in the groin, or armpit, seem, from Dr. Russel's account, to rank among the most certain diagnostics of the complaint. This is a subject of great curiosity and interest, but having never seen the disease, I do not feel myself qualified to discuss it. From Dr. Russel's description it would seem, that in certain cases of plague, many of the superficial lymphatic glands, dispersed over different parts of the surface of the body, become affected.

A disease, resembling this which I have described, in almost every symptom, has been mentioned by several writers on midwifery. They have supposed it to be peculiar to women in the puerperal state, and while they have differed in their opinions respecting its causes, they have agreed in referring it to circumstances exclusively connected with parturition. The general

ral idea to be collected of this disorder, from Mr. White's Treatise* on it, is, that "about twelve or fifteen days after delivery, the patient is seized with great pain in the groin of one side; accompanied with considerable fever.—The part soon becomes affected with swelling and tension, which extend to the labium pudendi of the same side only, and down the inside of the thigh, to the ham, the leg, the foot, and the whole limb; and the progress of the swelling is so quick, that in a day or two, the limb becomes twice the size of the other, and is moved with great difficulty, is hot and exquisitely tender, but not attended with external inflammation.—It (the swelling) is very smooth, shining, and pale, and even and equal to the touch in every part, except where the conglobate glands are situated, which, in some cases are knotty and hard, as in the groin, the ham,

* An Enquiry into the Nature and Cause of that Swelling in one or both of the Lower Extremities, which sometimes happens to Lying-in Women, p. 7 et seq.

ham, and about the middle of the leg, at its back part."

The only points of difference between this abstract, and my account, are, that in my case, the swelling began at the foot, and that the enlargement of the absorbent vessels did not occur to Mr. White, as indeed it is not distinguishable till the swelling abates considerably, and, in some cases, can hardly be felt at all. Mr. White has laid particular weight on the commencement of the swelling at the groin, because he has made that fact the basis of his theory; and from his general accuracy, I have no doubt that such was the progress of the swelling, in the cases which fell under his own observation. But it is not invariably the course of the disease. Mr. Simmons informs me, that he has seen it confined to the calf of one leg, after delivery, where the swelling had not affected the foot, and did not extend above the knee; and in a very remarkable case, which I shall mention afterwards, the swelling began also

also at the distant extremity of the limb. These facts prove clearly, that the disease may be produced, without the rupture of a lymphatic in the groin, which Mr. White imagines to be effected, by the pressure of the child's head against the brim of the pelvis, during labour; a supposition very questionable in itself, even if there were no direct facts subversive of his opinion. The theory which I have proposed, is liable to no difficulties, and indeed the proof of inflammation is so evident, that Mr. White is obliged to admit that it happens in the first stage of the complaint,* but he declares, that "this inflammation is not the original disease; but a symptom only, occasioned by the distension of the lymphatic vessels and glands." Why should the lymphatic vessels and glands be *distended*, if they were in a sound state, and capable of absorbing, at the time when the effusion took place? The effusion of fluid in dropsy does not inflame those organs. Some cause must evidently exist,

* P. 59.

exist, on Mr. White's own supposition, to prevent absorption of the effused fluid from taking place; and that cause, upon my theory, must produce and support the effusion.

I combat this opinion more earnestly, because it tends to prevent the practitioner from employing the only remedy, which I have found to shorten the disease; that of topical bleeding: a remedy, trifling if Mr. White's theory were just, but indispensable if mine be well-founded.

I cannot avoid noticing, that the possibility of accounting for this disease, from inflammation of the absorbents, had occurred to Mr. White, and that he has rejected the supposition, upon grounds inconsistent with his own statement of the symptoms. In speaking of the remote cause of the disorder, he says, (p. 47) "It may be said to be owing to an inflammation brought on the trunk or trunks of the lymphatics, by the pressure

sure of the child's head on them during the process of labour, or on the glands through which these trunks must pass, and which lie on the edge of the pelvis. This may produce an adhesion of the cells of these glands, and make them impervious, and cause a stagnation of lymph in the extremity, and thereby produce the disease in question. The glands may perhaps in time recover themselves, or the absorbents below the glands may go round, and take a new road. The objection to this theory is, that the disorder most frequently does not appear till several weeks after delivery, whereas one would have expected it always to have appeared in a few days, which seldom happens."

But upon turning back to Mr. White's general history of the symptoms, (p. 57)* it will be found, that he fixes the time for the appearance of the disease, at *twelve or fifteen days* after delivery; a period which rather belongs to the denomination of a few days, than of several

* Inquiry, &c.

weeks. And upon referring to the cases themselves, it appears, that in the first patient, the symptoms came on upon the eight day; in the third case, on the tenth; in the fifth case on the ninth; in the seventh case, on the thirteenth; in the tenth case, on the fourteenth; in the eleventh case, on the sixteenth; in the twelfth case, on the twelfth day; in the thirteenth case, on the ninth; and in the fourteenth case, within twenty-four hours. So that in nine cases out of fourteen, which Mr. White has stated, the latest period of the accession of the disease was *sixteen days*. The result of his information from Mr. Smith (p. 34) is, that it "always began in about fourteen or fifteen days after delivery," and that from Mr. Pool (p. 35) is, that "four of these were attacked with it in a fortnight after delivery, one in three weeks, and another in forty-eight hours." The assertion at p. 47, therefore, does not appear conformable to the facts, from which it must be supposed to have been deduced. Indeed, if Mr. White's assertion

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in that passage were true, namely, " that the disease does not appear till several weeks after delivery," it would be fatal to his own theory. For the rupture of a lymphatic, if it could produce the distension of the limb, as he supposes, must produce it almost immediately, at least in the neighbourhood of the supposed rupture.

On the other hand, there are cases, in which we have reason to believe, that the rupture of one or more lymphatic vessels actually happens, yet in which no swelling of this nature follows the accident. In dislocations of the humerus, for example, where the capsular ligament is torn, and the head of the bone is forced under the axilla, it is very probable that some of the lymphatics may give way. Yet we are not acquainted with any instance, in which the absorbent vessels, or conglobate glands have become enlarged and hardened, accompanied with this particular kind of effusion, though such dislocations have not been

been reduced for several months, and sometimes not at all. Rupture of the absorbents is certainly a much more probable occurrence, in such circumstances, than in the act of parturition.

The case to which I referred in p. 110, was accurately drawn up by Mr. Simmons, from his notes, at my request, and I insert it here in his own words, that the public may be in full possession of every thing yet known on this subject.

—— "aged 28, became a home-patient of the Infirmary, under my care, in the year 1791. The right ancle-joint was completely carious, from a scrophulous affection, and her general health much impaired. During the progress of the disease in the joint, she had proved with child, and was now in the sixth month of her pregnancy. Such generous diet as could be procured from the charitable contribution of her respectable neighbours, added to the pittance acquired

quired by her husband, was recommended, and she was supplied with medicines and applications from the Infirmary. At the proper time, she was delivered of a fine healthy looking child, after an easy and natural labour. About ten days from the time of her delivery, she complained of a swelling in the calf of her left leg, and of uneasiness in the inguinal glands on the same side, which, she informed me had subsisted for several days. The leg presented no discolouration, but was hard to the touch, of a shining appearance, and painful when pressed; the glands in the groin were enlarged, and painful on pressure. Her general health was, on the whole, amended since my first attendance, although the caries continued its ravages, unchecked by the particular circumstances of the case, or of the means used. As the affection was merely local, an anodyne fomentation was advised to be used twice a-day, and the saponaceous liniment with laudanum was applied after each fomentation. By these

these means, and these only, excepting the *electuarium laxans*, and opiate pills, which she had taken for several months, the disease subsided in less than a fortnight; the swelling never having extended beyond the calf of the leg.

"It will be impossible to explain this instance of disease, on the supposition of a ruptured lymphatic; and there was no evidence of any injury being done to any of the absorbent glands during labour.

"The carious limb was removed, as soon as she was fit to be admitted into the hospital, and the stump healing by the first intention, her general health was soon restored, and has continued with only casual interruptions to the present period."

Little can be known respecting the remote causes of a disease, which has been correctly observed in so few instances. In my patient, it was apparently

ly produced by the action of cold and moisture, and it has probably been occasioned by similar causes, in those cases where it appeared several weeks after delivery. But there are circumstances preceding delivery, which may operate as remote causes, and from which the frequency of its occurrence, in the puerperal state, may perhaps be explained.

It is an acknowledged fact, that during the last months of gestation, a considerable interruption is given to the return of blood, by the veins of the lower extremities, in consequence of the pressure of the loaded uterus, on the contained parts of the pelvis. The existence of venous plethora, under such circumstances, is proved by the varicous state of the superficial veins, which repeated pregnancies so often occasion. By the laws of the constitution, which it is unnecessary for me to repeat to pathological readers, this state of plethora in the veins, must be followed by encreased effusion from the exhalent vessels,

sels, and the encrease of exhalation must produce encreased action in the absorbents. In habits pre-disposed to the disease, occasional causes may readily excite inflammation, in a class of vessels thus extraordinarily stimulated. To this consideration we must join another; that much irritability in the lower extremities is evident, in the last months of pregnancy, from the frequency of cramps in the legs, during that period. The objection to this opinion is obvious; that the disease occurs after delivery. But I have shewed that the disease may exist, independently of every circumstance regarding parturition, and I do not think it impossible, though at present I cannot prove, that it may take place before delivery. Future observations must decide this question. But the violent pressure on the internal iliacs, and the accompanying veins and nerves, which takes place during delivery, must undoubtedly be considered as a powerful occasional cause of lymphatic inflammation, sufficient to account

count for the phænomena, without the supposition of a rupture of vessels.

It must also be considered, that the constitution is much more irritable, more liable to febrile and inflammatory complaints, after, than before delivery. The balance of the circulating fluids is suddenly and violently changed; there are new determinations, new sympathies produced, in a state of great debility, agitation, and anxiety. It cannot surprise us, that in circumstances so peculiar, a set of vessels, commonly exempted from inflammatory affections, should take on an unusual disposition.

From these views of the disorder, the method of treatment is easily deduced. As no inflammatory affection of the arterial system exists, and as the inflammation of the lymphatics is a local disease, topical bleeding is evidently best adapted to remove the symptoms; it is a remedy which proved remarkably useful in the case which I have related, and I should

should expect great advantages from its repeated application, upon any similar occasion that may occur in future. A succession of blisters will be a valuable addition to this course, and it will be proper to exhibit internally, gentle cathartics; perhaps cream of tartar, which appears to operate so powerfully on the absorbent system, in cases of dropsy, may be better adapted to this purpose than most other remedies of this class. By this method, the disease will probably be removed in two or three weeks, instead of continuing several months, which is the duration generally assigned to it, by writers on midwifery.

There is, as Mr. White remarks (p. 55),* a chronic swelling of the extremities, which resembles the disorder I have been describing. It is also occasioned by irritation given to the extremities of the lymphatic vessels, and it is remarkable, that in the following case of an outpatient of the Infirmary, which I had an opportunity of seeing, by the kindness of

* Inquiry, &c.

of Mr. Simmons, the swelling began in the distant part of the extremity, though the irritation commenced at the opposite point.

G——— aged forty, had a cancerous complaint in the left breast; about six weeks before I saw her, she was seized with pains in the arm-pit, striking down the arm, and enlargement of the axillary glands, and soon after, with a swelling of the hand, attended with considerable pain. The swelling rose gradually as high as the elbow, but never went farther. When I examined her, the swelling of the fore-arm and wrist was full, uniform, and not painful. No enlargement of the lymphatic vessels could be ascertained by the touch; and the swelling did not pit on pressure. There had been no considerable change in the state of the limb, during several weeks.

In such cases, perhaps, we see the effect of a degree of disease, sufficient to impede

impede the office of the absorbents, though not arising to inflammation. It is evident, from the preceding remarks, that the lymphatics are liable to active inflammation, more tedious in its progress than a similar affection of the blood-vessels; and it is highly probable, that the absorbent vessels are also liable to the disorder which we denominate chronic, or passive inflammation, which must in them be proportionally more lingering and indolent, than in the sanguiferous system.

In this chronic swelling, external stimulants will probably afford most relief, and I should expect considerable advantages from using a solution of camphor in spirit of turpentine, which I have found remarkably useful in relieving rheumatic pains. A succession of blisters will probably be useful in cases of this nature; but where the complaint arises from a permanent cause, as it did in the instance I have just given, it can hardly be deemed necessary to attempt a cure,

a cure, till the action of the irritating cause be removed.

In the Transactions of the Gottingen Society,* a case of this disease is related by Zinn, which deserves to be noticed, because it had a fatal termination. I transcribe it from the first volume of the Medical Museum, p. 335.

" A woman, thirty years of age, after a difficult labour, having the lochia greatly disturbed by some careless conduct, became much afflicted. Her right leg was seized with an œdematous swelling which extended from the groin to the heel, and enlarged the right labium pudendi. At the same time she was also seized with loss of appetite. Every probable means afforded by the art of healing was tried to remove the swelling, and yet it continued encreasing. neither diaphoretics, purgatives, nor diuretics, gave any relief; and fomentations and frictions excited more violent

* Tom. ii.

lent pain. An incision was made through the skin of the thigh, that the water might be drained off by an issue, but only a few small drops were discharged by it. The serum received on a piece of linen, had the appearance of jelly, its more liquid parts being resorbed. In the space of two months the patient expired. On dissecting the body, we found some of the inguinal glands scirrhous, greatly enlarged, and surrounding the crural vein, by which its diameter became very much diminished."

Since the former part of this essay was prepared for the press, another instance of this disease has occurred to me, in which I have had the satisfaction of finding the mode of practice I have proposed, succeed completely. The following is an accurate report of the state of the symptoms, and progress of the disease, as I observed them myself.

Jane Waters, of Garden-street, Salford,

ford, aged twenty-five, was delivered by an accoucheur, of her second child, December 26th, 1797, after being four days in labour. During delivery, she lay on her left side. Next day, December 27th, she was affected with pain and swelling of the left knee, which descended to the leg and foot of the same side. On the 28th December, the swelling began to rise from the left knee and to affect the thigh; it extended up to the left groin, and labium pudendi. I saw her, for the first time, on the 3d of January, 1798. I found the swelling tense, uniform, not discoloured; that there was a great sensation of rigidity in the limb, and that it was extremely painful on being touched, or moved. She felt exquisite pain in the ham, where I could perceive the lymphatics a little enlarged. The glands in the groin were not affected. She had been costive for several days. I ordered eight leeches to be applied to the left knee and ham, and that she should take two drachms of Rochelle salt, in solution, every three hours,

hours, till the bowels should be properly opened.

Next day, January 4th, I found that the leeches had procured a plentiful evacuation. She had also had several stools. The swelling was evidently lessened, and she said that her pain was much relieved.

January 5th, the swelling was considerably abated in the leg and foot, but continued tense upon the thigh. The Rochelle salt was repeated.

January 8th, the swelling of the thigh continued stationary, and gave some pain. Six leeches were ordered to be applied to the thigh, and the cathartic was repeated.

January 9th, the pain and swelling of the thigh were much relieved, but she could not yet use the limb, and the left foot swelled towards evening. She was now very open in her bowels.

January

January 16th, she had walked about, and attempted to clean out her room imprudently, in consequence of which, the left knee swelled again, and became very painful. The thigh, leg, and foot were not at all affected. I directed a large blister, to be applied round the knee.

January 18, the pain and swelling of the knee were almost entirely removed; but she was weak, and little able to move.

January 21, the affection of the limb is completely removed. She has no complaint, excepting debility, and a cough, which she had contracted previously to her lying-in.

This case is the more satisfactory, because writers on midwifery acknowledge, that this disease generally continues for several months, under their mode of treatment.

OF THE CROUP.

OF THE CROUP.

It is of great importance, to form an accurate opinion respecting the treatment of this disease, which is very short in its duration, and attended with extreme danger. Some modern writers have endeavoured to introduce distinctions, which are not warranted by any cases that I have met with, and I apprehend, that practitioners have been often diverted, by the suggestions of those authors, from the only effectual method of cure. It has been my lot, not only to have met with several instances of this disease in practice, but to have undergone it repeatedly in my youth, and to have seen a great deal of it in my family. I shall, therefore, describe

scribe it from my own observation, and shall explain the practice which I have invariably found to succeed, when employed sufficiently early in the disorder.

Some days before the appearance of the croup, the child is fretful, inactive, and drowsy: the eyes are somewhat suffused and blood-shot, and the complexion is muddy, or rather livid. There is some degree of cough, which generally resembles that attending a common cold; but sometimes has the peculiar shrill sound, even from the first. This cough, in the course of two or three days, becomes violent and troublesome, and it is then necessary to watch the patient with great attention. The dangerous attack is commonly made in the night, sometimes soon after the child is put to bed, but more frequently about midnight. The cough, on the approach of danger, has a shrill, barking sound, and returns in redoubled fits, the first of which, though very violent, is succeeded in a few minutes by a second, longer, and yet more

more violent. Every fit of coughing agitates the patient, to an extreme degree: the face is swelled and flushed; the eyes are protruded; a general tremor takes place, and there is a kind of convulsive struggle to renew respiration, at the close of each fit. There is no expectoration, at this period of the disease. As the complaint encreases, the coughing fits are sometimes more troublesome, sometimes they become less frequent; but an incessant difficulty of breathing comes on, accompanied by swelling of the throat, about the place of the larynx: the head is thrown back, in the agony of attempting to escape suffocation, and the whole extensors of the trunk, and of the legs, are sometimes thrown suddenly into action, to assist the effort, so that the whole body is bent backwards, as in tetanus; in this attitude, and in this effort, the patient expires. I once attended the inspection of a fine boy, who had died of the croup, and I observed, his struggles had been so violent,

violent, that the corpse rested, in a great measure, on the hind head and the heels.

There is not only an unusual sound produced by the cough, something between the yelping and barking of a dog, which it is impossible to describe, but respiration is performed with a hissing noise, as if the trachea were nearly closed up, by some light, spongy substance. The expression of the countenance is also appropriate, and will alone betray the disease, to an experienced observer. There is much distention, the bloom of the cheeks is greatly heightened, the eyes are swelled up, watery, and exhibit great signs of suffering. The trembling, hurry, and restlessness, though accompanied with heavy sleep, proceed to an excessive degree as the disease advances, and the heart and arteries are thrown into violent palpitations. Respiration becomes more stridulous, is repeated at longer efforts, and with greater exertion, till it ceases entirely. Spontaneous vomiting sometimes comes on

on, in the course of the disease, and a quantity of viscid mucus is discharged, but without much relief. Children who are subject to attacks of the croup, are sometimes seized with the deep, barking cough, which will encrease to such a degree as to create much alarm, about the usual time of the dangerous exacerbation, yet it will decrease again, and at length go entirely off, without any other remedies than common demulcents. Cases of this kind, I suspect, have been described as genuine paroxysms of croup; and very trifling methods of cure have been recommended, in consequence of their apparent efficacy in the spurious croup, which always cures itself. The diagnosis of this particular case, is to be drawn from the following circumstances.

1. In the spurious croup, the cough has not the shrill, whining sound, which marks it in genuine cases. It is hoarser, and the intervals are longer.

2. Respiration

2. Respiration is not so much affected in the spurious croup, even when the cough becomes alarmingly violent; and the obstruction does not produce the sibilation peculiar to croup, but resembles more a common dyspnœa.

3. The spurious croup is not attended with the restlessness, trembling, and palpitation of the arteries, which characterize the other.

I must observe, however, that these distinctions are only to be learned, from much attention to the different cases of the disease; for the sound of the cough is so similar in both, as to inspire even the most experienced with some degree of doubt. I have sat by the child's bedside repeatedly, watching for the moment of danger, while the cough was encreasing in violence; and have been only undeceived, by finding that no tremor or palpitation came on towards midnight, that the restlessness abated, and that

that sleep seemed to become more composed.

I have seen children affected with this disease, almost at all ages, under nine. In large families, if one child is seized with croup, most of the others generally begin, about the same time, to have symptoms of the spurious croup. I have never found reason to believe it infectious, and it appears very doubtful whether the disposition to it be hereditary. I have known it appear in families, to whom the symptoms were totally new.

The course of the genuine croup is very short. If the alarming symptoms which I have described, are not mitigated during the first six hours, the disease will generally prove fatal. It has happened several times, that I have been called, early in the day, to patients who had become seriously ill, only on the preceding evening, and in such cases I have only succeeded once. The proper

per time for administering relief, is when the cough, dyspnœa, and palpitation encrease, towards ten or eleven o'clock in the evening.

There can be no doubt, that the genuine croup is a disease highly inflammatory. In two cases, where dissection was permitted, I found the internal surface of the trachea, near the larynx, affected with the most violent inflammation. The membrane, so much talked of by the first writers on this disease, appeared, in both of these dissections, to be nothing more than inflammatory exsudation; it was observable in its different stages, as the inflammation had run down the surface, from a consistent substance at the upper part, capable of being pulled and torn, to the form of a purulent fluid, recently effused. If any other proof of the nature of the disease were wanting, I have received it in another manner, by seeing croup supervene, as an accessory disease, in two cases of ulcerated sore-throat. There had

had been little general fever, and there was no scarlet eruption, in either case. Though there were large ulcerations in the tonsils, there was, at the same time, vivid inflammation of the fauces. There was nothing uncommon in the symptoms, till the inflammation extended to the trachea, when faint, shrill coughing, hissing respiration, and restlessness came on, which were soon followed by death.

In a singular instance, I have seen pneumonic inflammation converted into croup. The inflammation had subsisted during ten days, in a boy about seven years of age; the acute pain in the side was relieved, but the pulse continued very rapid, though not quick, there was a considerable degree of dyspnœa, and the cough was frequent, with a pretty copious expectoration. On the morning of the tenth day he complained of pain in his throat, and in the afternoon, the cough began to assume the crouping sound. Leeches were applied to

to the throat, which produced a free discharge of blood, with an evident mitigation of the cough and dyspnœa. An attempt was then made to excite vomiting, by emetic tartar, but, though given in large doses, it run off by the bowels. Next morning, the cough was nearly gone, expectoration had entirely ceased, the respiration was hissing and difficult, and the pulse began to flag. Under these circumstances, it was thought necessary to stimulate the stomach in the most powerful manner. A grain of blue vitriol was given in solution, and as it produced no effect, seven grains more were successively exhibited, in the course of the day. No vomiting followed, and suffocation took place, in the general, fatal course of the disease.

In all the cases of croup which I have seen, I have found it necessary to bleed immediately, and when I have seen the patients sufficiently early, to entertain hopes of saving them, I have directed the evacuation to be continued, so as nearly

nearly to produce fainting. This is the essential point of the cure, without which no relief can be effected. Even if the patient should not be seen, till the day succeeding the attack, it is proper to bleed *ad deliquium*, if the subject be plethoric, and the difficulty of breathing and restlessness be great.

A large bleeding generally produces an instantaneous abatement of the symptoms; but this is not sufficient for the safety of the patient. A blister must, at the same time, be applied to the breast, or between the shoulders, and ought to be made larger than usual. In the case of very young children, we must almost despair, for it is extremely difficult to procure any blood from them by the lancet, and leeches afford a very inadequate mode of depletion. Children above two years of age, may have blood drawn from the hands or feet, in tolerable quantity. The operator must not be nice, respecting the appearance

pearance of mangling, in circumstances so dreadful.

When the debilitating effects of the bleeding are over, the blister being applied, it is next necessary to exhibit a vomit. I generally use tartar emetic, in the usual doses, till full vomiting takes place. Considerable quantities of ropy mucus are thus brought off. I have never seen the inflammatory exsudation vomited up, in the form of a membrane. Yet in the event of a decrease of inflammation, in the lower part of the tube, I cannot conceive, that there should be any difficulty in its being voided, either by vomiting or expectoration, excepting in some few cases, where the inflammatory exsudation acquires the consistence of a membrane, even in the branches of the bronchiæ. On the second day of the disease, from the approach of insensibility, it is sometimes very difficult to promote vomiting. I remember, in one case, to have given, after large doses of ipecacuanha and emetic tartar, three grains

grains of blue vitriol, before vomiting could be excited. The case was nearly desperate, for every effort to inspire, threatened suffocation. The irritability of the stomach was at length roused; much viscid mucus was discharged, and the child recovered.

If the first bleeding and emetic do not effectually relieve the cough, and difficulty of breathing, it becomes necessary to repeat the bleeding; and the evacuation in this case must again be carried as far as the patient's strength will permit. A repetition of the emetic, after the second bleeding, often puts an end to the disease; but if this should fail, we have nothing to hope from medicine.

The use of the warm bath may be very properly interposed, between these processes, and demulcents may be thrown in, to relieve the patient's sufferings, but I am convinced, that no other method, than the vigorous one which I

have described, is capable of curing a genuine case of Croup.

I have endeavoured to place this matter in a stronger point of view, because many lives have been sacrificed to the imaginary powers of asafœtida, or small, repeated doses of antimonials, from unfounded theories, of spasmodic constriction attending the disease. On the contrary, I conceive the Croup to be as truly inflammatory, as pleurisy or peripneumony, and not to be more remarkably accompanied with spasm, than those affections.

The operation of bronchotomy has been proposed, as a last resource, in the advanced state of Croup, but I believe, from what I have seen in dissections, it would be completely useless. The upper part of the hardened membranous substance might be extracted, with the forceps, but the fluid portion, which fills the lower part of the trachea, and the bronchiæ, and which could not be removed

moved, would still occasion a powerful obstacle to respiration, and the inflammation, still existing, would certainly not be diminished by the operation. In those cases where the membranous matter was discharged, (of which Dr. MONRO of Edinburgh has some very remarkable preparations) it seems probable that relief was found, because the inflammation of the trachea had terminated, with the first effusion. But in both the cases which I have seen inspected, it was evident that the inflammation was extending rapidly, though effusion had taken place long enough, to present the membranous appearance, in the upper part of the tube.

In the unfortunate circumstance, of the Croup's supervening to the ulcerated sore-throat, from the extension of inflammation to the trachea, it is extremely difficult to direct our practice, and if the symptoms of Croup run high, it becomes scarcely possible to save the patient. To discontinue the bark, while the

the ulcerations are gaining ground, would be to devote the patient to certain death; and general bleeding is expressly prohibited by the same circumstance. Large blisters to the throat, leeches, and repeated emetics, are the only means of relief reserved to us; and I must own, that I have found them ineffectual, in this perplexing coincidence.

OF THE

HOOPING-COUGH.

OF THE HOOPING-COUGH.

This is a disease, which has been too little studied. Authors afford nothing satisfactory, respecting its duration or its cure. It has been too much trusted to the management of nurses, and has been empirically treated, even by those physicians, who have applied themselves to the particular consideration of the complaint.

We labour, indeed, under great disadvantages in this investigation: a contagion which escapes our senses; which produces but temporary convulsions, by its proper action; and that exhibits to the dissector, nothing but marks of the violent commotions which it occasions;

casions; a disease varying in its symptoms, with age, with temperament, and by its combination with other disorders, present uncommon difficulties. I do not pretend to give a complete view of the subject, but I shall mention some circumstances, which I have found particularly necessary to be observed, in my own practice.

The hooping-cough appears at first, under a variety of forms; sometimes as a common catarrh, sometimes as a general fever, accompanied with a cough, and sometimes, though rarely, it assumes the form of pneumonic inflammation. It appears to combine with other diseases, more readily than any other complaint produced by specific contagion, and in the following remarkable case, I found it, after being nearly lost in combination with one of the most powerful exanthemata, recruit its forces, and extinguish the supervening disease.

Miss ———, aged one year and a half, had

had the hooping-cough, in a slight degree, for some weeks. When it seemed to be leaving her, she was seized with the measles, and there was an appearance of a very large crop of the eruption. Her cough was not very troublesome, and no longer resembled the hooping-cough. On the third day, she was seized with an extreme degree of dyspnœa, and a short, harrasing cough, and the eruption almost entirely disappeared. The pulse became innumerable. Leeches were applied to the extremities, blisters were applied to different parts of the body, and every method was used to renew the eruption, but without success. The cough encreased, but the dyspnœa began to relax, and at length, to my great satisfaction, the type of the hooping-cough was renewed, and my patient recovered, by time, and change of air. Not one spot of the eruption of measles ran its usual course.

The cough generally continues, without much encrease, for some time, even after

ter it assumes its proper type; and it seldom reaches the greatest degree of violence, till the second or third week. The length of this period depends on the age, and strength of the child; the younger, and more robust, suffer more early, and more severely, than others. A thick expectoration, of a purulent appearance, comes on, when the fits of coughing become frequent: it varies in quantity, in different cases, and is rather vomited, than coughed up, at the close of the fit. I have known the fits return every ten minutes, during the night. In this state, the patient crows, in making a short inspiration, while the cough is suspended for a moment, and the extreme agitation of the lungs, and of the alimentary canal, sometimes produces a discharge of blood, both upwards and downwards. A great degree of flatulence prevails in the stomach and bowels, during this stage, and the paroxysms of coughing are accompanied with loud croaking in them. Thus the disease proceeds, till the patient's strength is reduced

duced to the lowest degree, consistent with life. Recovery takes place very slowly, by a gradual abatement of the symptoms, and a tardy return of strength. A very frequent pulse, quick at the beginning, but towards the height of the disease, small and thready, attends the complaint in its whole course. This constant degree of fever sometimes destroys the patient, by its continuance; sometimes, death seems to be occasioned by effusions of blood, into the head, or lungs. Nothing can be more uncertain, than the duration of this disease. Even after it appears to have entirely ceased, a slight exposure to cold will renew it with considerable violence; and accidental coughs, for some time after its disappearance, partake of the sound of the hooping-cough.

This disease is said to have been cured, by almost as great a variety of remedies, as intermittent fever. Bark, cicuta, tincture of cantharides, are all recommended by the experience of some practitioner.

titioner. I believe that they may all have succeeded equally, for they have generally been tried about the height, or in the decline of a disease, which in most cases will cure itself. The only question is, whether it be possible to cut short the progress of Hooping-cough, or whether it must be left to run its course.

In the beginning of the disease, when it is accompanied by symptoms of fever and inflammation, bleeding is sometimes necessary. Blisters are more frequently necessary, and Dr. Armstrong's plan of exhibiting tartarized antimony, in doses which prove gently emetic, is undoubtedly very useful; chiefly, perhaps, by supplying the means of expectoration, to very young children. But after these preliminary steps are taken, I believe that the only remedy, which promises to shorten the disorder effectually, is the solution of white arsenic. I have employed this medicine, in several cases of Infirmary-patients, with tolerable success; and I have occasionally given it in private.

vate practice, with so much advantage, that I think it deserving of farther trials. The dose with which I generally begin, is one drop daily, for an infant; and for children under seven, two drops, repeated according to the state of the symptoms. It requires some caution, to avoid the accumulated action of this medicine. The exhibition of the solution should be suspended occasionally, for a day or more, and the bowels should be gently opened, by means of a little calomel.

The state of the bowels should be carefully attended to: for, in some instances, astonishing accumulations take place, in very young children, and become sources of fever, independent of the original disease.

OF THE USE OF THE

NITRIC ACID, IN SIPHYLIS,

and some other Diseases.

OF THE USE OF THE NITRIC ACID, IN SIPHYLIS, AND SOME OTHER DISEASES.

Every practitioner who has had much experience in siphylitic complaints, must have found reason to regret, that in certain stages of those disorders, mercury ceases to produce any salutary effects, and that it even aggravates the patient's sufferings, by the peculiar symptoms which it occasions. Cases of this nature have been more frequent, since a practice was introduced of patching up siphylitic disorders, by slight courses of mercury, just sufficient to subdue the first symptoms, but unequal to the eradication of the taint. The advocates for mitigating the old method of salivation, carried their opposition to

excess, as it generally happens in matters of controversy, and having begun by shewing, that their adversaries had administered too much mercury, they finished by advising an exhibition, which experience has shewn to be too small. I have met with several cases, in which the bones have been attacked, some years after the patients had been declared to be sound, by practitioners of reputation; and having felt the irksomeness of a conjuncture, in which I could neither relieve my patients, nor satisfy myself, it gave me great pleasure when the nitric acid was announced, as a remedy adapted to such disastrous situations.

Since Mr. Scott's account of its application with this view, was published, I have employed it in a variety of cases, both in private, and hospital-practice, and I shall now offer to the public the result of those cases, which appear to me conclusive.

1. *Eliz.*

1. *Eliz. Johnson*, a middle-aged, married woman, had been infected by her husband, nearly three years before she came under my care. As she did not for a long time suspect the nature of the complaint, mercury had not been fully employed, till within a short period previous to her admission into the hospital. She had constant pains in the head and limbs, when I saw her; nodes on the shin-bones; a large ulcer on the crown of the head, and some smaller ulcers on the thighs; she was weak, much emaciated, and had a considerable degree of hectic fever.

She informed me, that she had undergone a complete mercurial course, a few months before she came into the hospital; however, that I might ascertain, beyond all doubt, whether the disorder was still within the reach of mercury, it was thrown in, under my own inspection, and opiates were administered at the same time, in sufficient quantities to prevent it from running off by the bowels,

bowels, till her mouth became very sore. Though she was in no respect relieved by this process, I thought it right to support the soreness of the mouth for some little time, till it was apparent, that nothing was to be expected from its continuance. The mercury was then omitted, the patient was put on a course of bark and opium, and when the mercurial symptoms disappeared, I sent her to her home, which is in an airy situation, within a few miles of Manchester, and, as a last effort, directed forty drops of the diluted nitrous acid to be taken in water, four times a-day. She was now confined constantly to bed, and I expected a fatal termination of the disease. The ulcerations had never been affected, in the slightest degree, by the mercurial course. During several weeks, no change took place: the dose of the medicines was in the mean time gradually encreased, till she came to take a drachm of the diluted acid four times a-day. I was then informed, that the ulcer on the

crown

crown of the head was healing, and that she was recovering strength.

I received no distinct account of her, till near four months afterwards, when she was able to walk to the Infirmary. The ulcer on the head was then completely healed, and her pains had left her almost entirely. She had not, by her own confession, been very diligent in using the acid; she said, that she thought it disagreed with her bowels, and that she had discontinued it three months; that she had afterwards taken sarsaparilla; and that there was no alteration, either in her pains, her weakness, or in the size of the ulcers, before she gave up the use of the acid.

2. *A. B.* a person between thirty and forty years of age, irregular in his manner of living, applied to me, on account of an ulcer on the under side of the penis, which I considered as a chancre, but which he would not believe to be venereal

venereal. On examination, I found that he had slight ulcerations in the tonsils, copper-coloured eruptions, and nocturnal pains. He had observed the ulcer, for more than two months. I put him on a mercurial course, and when his mouth became pretty sore, the symptoms gave way, and the chancre was healed. I urged the necessity of continuing the course for some time longer, but he was disgusted with his medicines, and discontinued them. I heard nothing of him for four or five months, when he returned to me, with his face and head overspread by venereal eruptions, and complaining of great heat in the nose, and pains over the orbits. I found, on examination, the membrane lining the nostrils deeply inflamed, and small ulcerations formed on the lower part of the septum narium, on each side. I thought it necessary, from these appearances, to intimate the possibility of his losing a part of the nose, especially if I might depend on his solemn assertion, that he had not been exposed

exposed to fresh infection. Mr. Scott's account of the nitric acid had not then appeared, and I had no choice respecting the remedy. Mercury was again administered, and it again removed the symptoms, after a considerable degree of soreness had been kept up in the mouth, during nearly three months. When relief from his sufferings was thus obtained, he became once more unmanageable; complained of the constant inconvenience, resulting from the affection of his mouth; feared that the mercury would *get into his bones*, according to the vulgar opinion; and at last withdrew himself entirely.

At the expiration of a year and a half, he applied to me again, much altered in his appearance, and convinced, too late, as I feared, of his error in relinquishing his medicines prematurely. He had now incessant, racking pains in his head and limbs; a node was formed on the left tibia; and he had a frequent, thin discharge from the left nostril, attended

tended by pain, about the situation of the ethmoid bone, in the left orbit. On blowing his nose, he sometimes discharged portions of a fleshy appearance, from that side, and every discharge of this nature was succeeded by a painful sense of rawness, extending up to the orbit, and an extreme sensibility on the admission of air in inspiration. He expressed the strongest desire of relief, but begged, that if it were possible to remove the disease otherwise, he might take no more mercury. He was much emaciated by pain, total loss of sleep, and anxiety of mind. His appetite was almost entirely gone. After representing to him the small chance of a cure which he had left himself, and the necessity of steadily observing the plan which I should lay down, I directed him to take the diluted nitrous acid, beginning with thirty drops, four times a-day, and taking half a grain of opium, every night, or occasionally in the day, according to the state of his bowels. A blister was applied immediately, to the

node

node on the left leg. Under this treatment, the pains in the head and legs abated, so as to restore the patient to tolerable ease, in the course of three weeks; and the node disappeared; but the pain in the orbit, and fleshy discharge from the nostril seemed rather to augment. There was no soreness of the mouth. He now felt great weakness in both thighs, which were considerably shrunk, and was much troubled with a dull aching in them, which he had not perceived, till the acute pains in the legs left him. By this time, he had encreased the dose of the acid to fifty drops, four times a-day, and it began to affect his bowels, though it was joined with considerable doses of opium. I therefore proposed to him to resume the use of mercury, which had always produced the happiest effects on his constitution. The mercurial course was then entered upon, by giving five grains of the mercurial pill, night and morning, and in a few days after, he discontinued the use of the acid. All his symptoms

symptoms were removed, soon after the mercury affected his mouth.

3. *David Jones*, was admitted an in-patient, June 27, 1796, for a rheumatic complaint, which had entirely deprived him of the use of the lower extremities. There was some appearance of distortion in the spine. He took diaphoretic medicines, and opiates, and had caustics applied to that part of the spine, which seemed to be incurvated. A few days after his admission, on his informing me that he had had a venereal complaint, which he thought had never been completely cured, I ordered him a few grains of calomel, every night, at bed-time; but as no relief was obtained by this, or the other remedies, and as the disease assumed more of a paralytic form, they were discontinued, and he was ordered to take our *infusum stimulans*, an infusion of horse-radish and mustard-seed. He continued to be confined to bed, without motion in the lower extremities, having blisters occasionally applied, till

till January 24, 1797; the issues having been permitted to heal up. I then ordered him forty drops of the diluted nitrous acid, four times a-day, which, on the 13th February, were encreased to a drachm, four times a-day. Under this course he began gradually to recover; he was enabled to walk about with little difficulty, and on the 27th February, he was well enough to be made an out-patient. He has since, completely regained the use of his limbs.

4. *William Brown*, was admitted an in-patient, January 23d, 1797, with a sciatic pain in one thigh, which obliged him to walk upon crutches, and sometimes disabled him from moving at all. The part affected, was blistered repeatedly, and he took the tincture of guaiacum daily, with occasional doses of Dover's powder. This plan was continued till the beginning of March, with little or no benefit. I then determined to try the power of the nitric acid, induced

duced by its effects upon Jones, and by the analogy which Mr. Scott had pointed out, between the action of this medicine and the supposed operation of mercury, which has proved so valuable a remedy in cases of chronic rheumatism. This man began to take the acid, in the same manner with the preceding patients, and I pushed the dose to a drachm four times a-day, as soon as he could be brought to take the necessary quantity of liquid. I had the satisfaction, in this case also, of obtaining a complete cure. The patient, when I saw him last, walked upright, without any assistance.

I did not perceive, in any of these cases, that the mouth was affected by the exhibition of the acid, in the manner described by Mr. Scott.

5. *Ann Major*, in consequence of a siphylitic affection, imperfectly cured, was liable to nocturnal pains and nodes, chiefly about the forehead. She had been

been ill upwards of five years, when I first saw her. Mercury, mezereon, sarsaparilla, and tincture of guaiacum were successively employed, with various success, till last summer, when I put her on a course of the nitric acid. In a few weeks, she felt more relief from this medicine, than from any other that had been employed. In August last, she was ordered to take five drops of muriatic acid, four times a-day, in water. Under this course, she has had no return of pain, but thinks her appetite and strength improved.

6. *Samuel Lloyd* was admitted an inpatient, August 21, 1797, complaining of constant pain in his head, which was so severe as to deprive him of rest, and render him incapable of any occupation. He had been ill for several months. I directed eight ounces of blood to be taken from the jugular vein; a blister to be applied to the crown of the head, and three grains of calomel to be given every night, at bed-time. On the 26th, finding

finding that he was not relieved, I directed blisters to be applied behind the ears. On the 28th, he shewed me a considerable portion of bone, which he had just discharged from one nostril. Upon a strict enquiry, he informed me, that he had had a gonorrhœa, accompanied with a chancre, about seven years before; that he had taken mercury, under the direction of a medical practitioner, and had been declared cured. I ordered the calomel to be omitted, and directed him to take five drops of muriatic acid, four times a-day.

The small quantity of calomel which he had taken, affected his mouth so much, as to produce a smart spitting: by this extreme susceptibility of the system, perhaps, the practitioner, who had put him under a former mercurial course, might have been deceived, respecting the quantity necessary to be exhibited. His pains were relieved, while the spitting continued; I persisted in the use of the acid, and on the 14th

of

of September, his pains were entirely removed; he had discharged no more bones from the nostril, and he only complained of an internal noise in his head. His mouth had been perfectly well upwards of a fortnight.

September 29th, the pain returned with great severity. The muriatic acid was then omitted, and the nitric substituted in its place.

October 7th, his pains were lessened, and his mouth had become extremely sore, by taking forty drops of the diluted nitric acid, four times a-day.

October 16th, his head continues easy, but he complains of pain in his limbs.

November 5th, his mouth was again sore, and there was a pretty copious discharge of saliva; the pain in his head had been returning for some time: it was now violent, particularly in the forehead.

forehead. A blister was applied, but produced little relief.

November 16th, the pain in the head had become excruciating: there was still considerable soreness of the mouth. I now ordered the acid to be discontinued, and directed him to take ten grains of the oxygenated muriate of pot-ash, thrice a-day.

November 20th, a large node appeared on the left temple; he thought his pain diminished, after the first dose of the medicine. It was encreased to fifteen grains, four times a-day.

November 28th, his forehead and face were extremely painful. The node was encreasing. His mouth was very sore, but there was no encreased discharge of saliva.

December 7th, the head and face continued very painful. There was a general enlargement of the *os frontis*. The pain

pain of which he complained in his mouth, seemed to be an affection of the bony parts. There was no soreness of the gums, or ptyalism. I now discontinued the oxygenated muriate, and put him on a course of calomel.

December 21st, his head was much easier, though his mouth had not yet become sore.

February 8th, his head is completely relieved: his mouth is sore. He has been very open in his bowels, during the last eight days.

March 1st, his head continues easy, but he complains of pain at the angles of the jaws, in consequence of the mercurial action.

7. *Mary Keene*, had been a patient of the Infirmary, at different periods, during the course of five years, for siphylitic complaints, which were often suspended, but never entirely removed, by

the use of mercury, guaiacum, mezereon, and sarsaparilla. She applied to me once more, as an out-patient, in summer, 1797. She then complained of pains in the bones, and the occasional appearance of nodes, chiefly on the forehead. I ordered her to take five drops of muriatic acid, four times a-day.

When I last saw her, she had continued this medicine upwards of a month, and thought her pains greatly relieved by it. No nodes had appeared.

She used no other medicine at the same time, and she had employed no mercury for a very considerable time previous to her taking this acid.

8. *John Lees*, had the venereal disease upwards of four months. He had chancres originally, which were healed, when I first saw him, and he now complained of pains in the bones, sore throat, a large, nauseous discharge from the nose, and some external ulcers. He had taken

taken mercury, but not for some time before I saw him. I ordered him half a drachm of diluted nitrous acid, four times a-day. He continued this course for three weeks, without the smallest advantage; I then threw in mercury, still administering the acid, and his symptoms are yielding, more quickly than I could have expected.

In the course of two months, after this report, he was able to attend as an out-patient, at the Infirmary.

Besides the cases which I have thus mentioned at length, I have used the nitric acid in a variety of venereal complaints, in conjunction with mercury. I have not perceived, that by this combination, a smaller quantity of mercury was sufficient to eradicate the disease, nor have I found that the sensible action of mercury on the salivary glands, was at all promoted, by the use of the acid.

My observations would rather lead me

me to suppose, that the acid lessens the irritability of the system, and prevents the extent, to which the mercurial disease usually proceeds. In speaking of immediate deductions from facts, I set the chemical pathology aside.

It appears from the facts I have mentioned, that the specific power of the nitric acid, in venereal complaints, is limited, to certain symptoms, in the advanced stages. It seems to remove the pains of the long bones, and to act on the superficial ulcers of the third stage, but I should hardly be inclined to trust the cure of any well-ascertained venereal affection, to the acid alone. Mr. Simmons's trials of this remedy, which will be found in the Appendix, shew that the acid is capable of extinguishing the symptoms, in a recent case.

I have never been able to ascertain clearly, that the soreness of the gums, and slight salivation, of which patients certainly complain sometimes, while they

they are using the acid, depend on a general action on the salivary glands. When the acid mixture is not sucked through a quill, or a glass tube, the gums are affected by the direct application of the acid; and patients have observed to me, that even with the precaution of using glass tubes, they still felt, that every dose of the acid affected the teeth and gums. I can positively assert, that I have known the acid taken in large quantities, for a considerable length of time, in conjunction with the free use of mercury, without producing any ulceration of the gums, or encrease of saliva; yet with the effect of destroying every venereal appearance, in well-marked cases.

I do not undertake to explain these contradictions to the principles, on which the use of the nitric acid has been introduced, in this disorder. Of the facts related by Mr. Scott, whom I feel a pride in mentioning, as one of my earliest, and most valued friends, I cannot

not entertain a doubt. And if my experience differs, in any respect, from his, I hope the variation may be more owing, to the great difference between the climates, in which we have respectively used the medicine, than to inaccuracy on my part.

Supposing the efficacy of the nitric acid, in this disease, to be ascertained, an important question will remain to be decided: how far the sulphuric, and muriatic acids are capable of acting in a similar manner. The operation of these three acids has, hitherto, been considered as nearly identical. We have used them indiscriminately, as tonics, and they have all produced those effects on the system, which the chemical physicians ascribe, at present, to the action of oxygen. The muriatic acid, in particular, has been much employed by me, both in private and hospital practice, for restoring the strength of the moving fibre, in cases of scrophula, of phthisis, of dyspepsia, or of general debility; and

I have

I have always found its effects to be, an acceleration of the pulse, an agreeable, glowing sensation in the stomach, a feeling of encreased vigour and alacrity, and a heightening of the complexion. It has proved, in many instances, an useful substitute for bark, steel, and bitters, by the smallness of its dose, and by its freedom from the disagreeable taste of some of those remedies.

The reader must have perceived, that in one or two of the preceding cases, the effect of the muriatic acid was slightly tried. Perhaps, in the progress of this enquiry, more accurate distinctions may be established, respecting the relative powers of these different acids. At present, the nitric appears to be the more valuable.

After my success with the nitric acid, in chronic rheumatism, I was induced to employ it in some cases of general debility, and great irritation of the nervous system, and I have derived as much advantage

vantage from it, as could have attended the use of the most powerful tonics. I am persuaded, that in many irritable, bilious habits, it may be used with great benefit, in place of bark, and the other usual remedies. In typhus, it will probably be found an excellent tonic, instead of bark, especially when the bowels are irritable, and when the muriatic acid would be apt to produce, or encourage diarrhœa. From the great encrease in the dose, upon which we now venture, we may expect an action, nearly adequate to all the purposes of tonics, in fever, with the advantage of a remedy less offensive to the palate, and more effectual in relieving thirst. The only case of typhus, in which this medicine can be contra-indicated, is, when there is much diarrhœa, or tendency to active inflammation, or to hæmorrhage. Yet even under these circumstances, I conceive that the full dose only is prohibited; in conjunction with opiates, it may be moderately used, with advantage.

In

In giving the diluted acid, with opium, it may be proper to observe, that the opium should be added to it in substance. The addition of a drachm of laudanum, to an ounce or two of the diluted acid, will sometimes produce an explosion, especially if the phial be agitated.

Upon the whole, I think we may conclude, that the nitric acid has a powerful effect in certain stages of the venereal disease, but that neither the extent, nor the permanency of this effect is yet ascertained. That we have acquired, at least, a valuable auxiliary to mercury, an useful remedy against chronic rheumatism, and, what was much wanted, a palatable tonic.

I have been induced to try the oxygenated muriate of potash, a remedy which we owe to the chemical pathology, by the favourable accounts I had heard of its action, from some of my medical friends. I have found it efficacious in the true

scurvy

scurvy, cases of which occur sometimes among the poor, in consequence of improper diet; I have even thought, that the soreness of the gums was sooner healed by this, than it is usually by ordinary remedies. In siphylitic complaints, I have seldom employed it, and in them, I have seen no remarkable advantage derived from it. I have tried it with some degree of perseverance, in cases of general debility, but it has always disappointed me, and the patients have afterwards been relieved by the bark, and other tonics. In one slight case of dropsy, it operated as a diuretic, and the disease was cured. But in several other dropsical patients, who took it from three weeks to a month, no encrease of urine was produced. I have generally given it in the dose of fifteen grains, every four hours.

I have been informed, that this medicine has been found to diminish the pains of the shin-bones, in lues, in a remarkable degree. In the case of Lloyd, which I have

have given, it had no influence on the nocturnal pains of the head. It appears to be perfectly safe in its application, for, though it has often disappointed my hopes of its action, I never found it productive of any inconvenience to the patient.

OF THE TREATMENT
of the
DYING.

Disturb him not—let him pass peaceably.

OF THE TREATMENT OF THE DYING.

There is hardly any subject, on which books afford us more impressive topics, than the consideration of death; and perhaps there is none less studied in its minute details. The wise look beyond it, and the inconsiderate escape from their reflections, when they would draw them towards the terrible object. It might be expected, that a scene through which we must all pass, should excite a closer attention; especially as the physical process of death loses much of its horror, on a near view. But there is yet a more powerful motive, for lifting part of the veil; the sufferings of persons in the last stage of death, are often aggravated,

vated, by the prejudices and indiscretion of their attendants. When all hopes of revival are lost, it is still the duty of the physician to sooth the last moments of existence; and it belongs to his province, to determine when officiousness becomes torture.

It is scarcely necessary to premise, that the following observations can only be applied to foreseen, or as we term it, natural death. Philosophically speaking, indeed, all death is sudden: the ultimate period of circulation and respiration, is a total and instantaneous change from the lowest degree of life. We may adopt, on this subject, a thought, which a certain writer, more noted for his wit than his morality, has introduced over the body of a ship-wrecked sailor: *si bene calculum ponas, ubicunque naufragium est.* But when death is occasioned by unexpected circumstances, it is certainly proper to employ the means of recovery, which have been so often impressed on the view of the public, though

though perhaps the efficacy of those means has been over-rated. The sensibility of the patient is probably so quickly destroyed, by some accidents, particularly by drowning or suspension, that ineffectual attempts can do no other harm than to fatigue the attendants.

When the approach of death is ascertained, either from the symptoms of the disease, or by the patient's own feelings, the friendly offices of the physician are not less grateful to the sick, than satisfactory to the surrounding relations. He will not, like ignorant practitioners, torment his patient, with unavailing attempts to stimulate the dissolving system, from the idle vanity of prolonging the flutter of the pulse for a few more vibrations: if he cannot alleviate his situation, he will protect him against every suffering, which has not been attached to it by nature.

While the senses remain perfect, the patient ought to direct his own conduct,

both in his devotional exercises, and in the last interchange of affection with his friends. The powers of the mind, after being forcibly exerted on those objects, commonly sink into complete debility, and respiration becoming weaker every moment, the patient is rendered apparently insensible to every thing around him. But the circumstances of the disease occasion much variety in this progress. In fevers, when the brain suffers by suppuration, the interval between oppression and death is hardly discernible. In peripneumony, with all the determination to the head, which is necessarily caused by the state of the lungs, the patient is generally collected previous to death. Indeed, in most cases, in which the patient is destroyed by the rapidity of circulation, there is a sort of lucid interval, immediately before dissolution, because the action of the vessels is at length retarded, by the debility of the dying state. This may be perceived, by the looks and gestures, even when

when the patient is incapable of speaking.

In those who die of chronic diseases, the gradation is more slow, and distinct. Consumptive patients are sometimes in a dying state, during several days: they appear, at such times, to suffer little, but to languish for complete dissolution; and I have known them express great uneasiness, when they have been recalled from the commencement of insensibility, by the cries of their friends, or the efforts of the attendants to produce pain.

In observing persons in this situation, I have always been impressed with an idea, that the approach of actual death, produces a sensation similar to that of falling asleep. The disturbance of respiration is the only apparent source of uneasiness to the dying, and sensibility seems to be impaired, in exact proportion to the decrease of that function. Besides, both the impressions of present

sent objects, and those recalled by memory, are influenced by the extreme debility of the patient, whose wish is for absolute rest.* I could never see the close of life, under these circumstances, without recollecting those beautiful lines of Spenser:

> Sleep after toil, port after stormy seas,
> Ease after war, death after life doth greatly please.

In some delicate and irritable persons, a kind of struggle is sometimss excited, when respiration becomes very difficult: I have known this effort proceed so far, that

* I should not have presumed to speak so positively of these sensations, if I had not once experienced them in some degree, at the close of a delirium, of three weeks continuance, in a very dangerous typhus. An anecdote has been published, of a late eminent anatomist, which, I hope, is well-founded. A few minutes before his death, he said to those around him, "If I had a pen in my hand now, and were able to write, I could tell how easy and pleasant a thing it is to die."

Montaigne was among the first modern writers, who had the resolution to contradict the general opinion of the painfulness of death, and he has nearly exhausted the subject.—Buffon followed him, with more eloquence, but less argument.

that the patient, a very few minutes before death, has started out of bed, and stood erect for a moment; but this appeared to be the effect of apprehension. Those who resign themselves quietly to their feelings, seem to fare best.

The action of the arterial system is gradually destroyed, and not always in the same direction. This difference depends on the nature of the destroying cause: when this is general debility, however produced, the pulse ceases first in the extremities, which become entirely cold, and the larger vessels die successively, till the action of the heart itself is extinguished. In the nurse's phrase, the patient *dies upward*. But when the cause of death is a more partial affection, in apoplexy, for example, the pulse continues in the wrists and feet, and those parts even feel to the hand uncommonly warm, just before death.

One of the surest indications of the nearness

nearness of death, is the alternate tossing of the arms, from the breast backwards. This, perhaps, is an effort to assist the muscles, which dilate the chest.

The length of the interval between insensibility, and the absolute cessation of existence, which occurs in so many cases, has given rise to a multitude of superstitious notions, and mischievous practices among the vulgar. Indeed, some of these notions are of considerable antiquity. Under the heathen mythology, it was believed that the struggles of death continued, till Proserpine had cropt the hair on the crown of the head, as victims were treated at the altar. Virgil has preserved this opinion, in the fourth book of the Eneid, where he offers so fine a picture of the dying agonies of Dido:

Tum Juno omnipotens, *longum miserata dolorem,*
Difficilesque obitus, Irim demisit Olympo,
Quæ luctantem animam, nexosque resolveret artus.
Nam, quia nec fato, merita nec morte peribat,
Sed misera ante diem, subitoque accensa furore,
Nondum illi flavum Proserpina vertice crinem
Abstulerat,

Abstulerat, Stygioque caput damnaverat Orco.
Ergo Iris croceis per cælum roscida pennis,
Mille trahens varios adverso Sole colores,
Devolat, et supra caput astitit: hunc ego Diti
Sacrum jussa fero, teque isto corpore solvo.
Sic ait, et dextrâ crinem secat: omnis et unà
Dilapsus calor, atque in ventos vita recessit.

It does not appear, that the attendants, in those ages, presumed to accelerate the death of the sufferer; but in the two last centuries, it was very common to strip the dying, to drag them out of bed, and place them on mattresses of straw or hair, in the middle of the room. Religious habits, ashes, and relics were then thrown upon them, for the consolation of those,

——— who to be sure of Paradise,
Dying put on the weeds of Dominic,
Or in Franciscan thought to pass disguised.

The Hindoo, perhaps, feels little inconvenience from being placed, in his last moments, by the waters of the Ganges, though extended on the soil; but in our winterly climates, such fatigue and exposure must have been a dreadful

dreadful aggravation of the horrors of a death-bed. Erasmus gives a masterly account of those extravagances of mistaken devotion, in his dialogue, entitled The Funeral.

The effects of these impressions still remain: it is a prevalent opinion among nurses and servants, that a patient, whose death is lingering, cannot quit life while he remains on a common bed, and that it is necessary to drag the bed away, and to place him on the mattress. This piece of cruelty is often practised, when the attendants are left to themselves. A still more hazardous practice has been very prevalent in France and Germany, and, I am afraid, is not unknown in this country. When the patient is supposed by the nurses to be nearly in a dying state, they withdraw the pillows and bolster from beneath his head; sometimes with such violence, as to throw the head back, and to add greatly to the difficulty of respiration. A full account of this inhuman custom,

may

may be seen, in a tract preserved by VALENTINI,* drawn up by a German lawyer, in which he asserts, that patients have been repeatedly suffocated in this manner, when there was no reason to expect death from the symptoms of the disease. As the avowed motive for this barbarity, is a desire *to put the patient out of pain*, that is, to put him to death, it is incumbent on his friends to preserve him from the hands of those executioners.

Another improper practice, is the precipitation with which the attendants *lay out* the body, immediately after death appears to have taken place. I have known them strip the body, in very cold, stormy weather, wrap it in cold linen, throwing a single sheet over it, and opening the doors and windows of the apartment, in little more than half an hour, after a patient had died suddenly.

There

* Novellæ Medico-legales, p. 1200.

There is, indeed, a singular instance recorded by SYDENHAM, of the revival of a patient thus used, during the prevalence of the fiery treatment of small-pox. A young man, having gone to Bristol, was seized with the small-pox, and became delirious. During the absence of his nurse, the attendants supposed him to be dead, and on account of the heat of the season, and the patient's corpulency, took the body out of bed, and laid it naked on a table, merely throwing a sheet over it. The patient, thus cooled, began to revive. His nurse, on her return, perceived signs of life in him; he recovered, and, several years afterwards, told this story to Dr. Sydenham. But the rough treatment of the body, and the sudden alteration from the temperate warmth of the bed, to the rigorous cold of a winter's night, have, perhaps, in some cases, extinguished the feeble remains of life, which might have been cherished by more gentle methods.

It is too certain, that the helpless patient feels all these cruelties, after he has become unable to express his sensations distinctly. The testimony of persons, who have recovered from apparent death, leaves no doubt on this head. Perhaps a more deplorable condition can scarcely be conceived, than that of the expiring master of a family, transferred from the soothing care of his friends, to the officious folly, or rugged indifference of servants. This is a state of suffering to which we are all exposed, and if it were unavoidable, I should be far from desiring to unveil so afflicting a prospect. But the means of prevention are so easy, that I cannot forbear to solicit the public attention to them.

When the tossing of the arms, which I have described, the rattling noise in respiration, and difficulty of swallowing have come on, all unnecessary noise and bustle about the dying person should be prohibited. The bed-curtains should be drawn nearly close, and unless the patient

patient should place himself in a posture evidently uneasy, he should be left undisturbed. Exclamations of grief, and the crouding of the family round the bed, only serve to harrass him.

The common practice, of plying him with liquors of different kinds, and of forcing them into his mouth, when he cannot swallow, should be totally abstained from.

When he no longer breathes, one person only should remain in the room, who should take care that no alteration be made in the state of the bed. Every thing should be conducted, as if he were in a transitory sleep. If the weather be hot, the windows of the room may be opened, and the bed-curtains undrawn, in the course of two or three hours. In winter, it will be sufficient to withdraw the curtains within that time.

There can be no just reason for the haste, with which it is usual to lay out the

the body. Several hours may be very properly suffered to elapse, before this is done; for the joints do not commonly become rigid for a considerable time. At the end of that period, the body will be completely cold, and all remains of sensibility will have been extinguished.

It is far from my intention, to excite, by these remarks, apprehensions respecting premature interment, in those who may be led to peruse this paper, without much knowledge of medical subjects. The period to which I wish to direct attention, precedes the funeral by several days, according to the customs of this country; and it must require uncommon folly, to incur any hazard of such an event.

In France, there seems to have been a very blameable degree of haste, and there can be little doubt, from the facts mentioned by BRUHIER (even allowing something for exaggeration), that persons

sons have revived on the bier, and during the performance of the funeral-service, after having been rashly pronounced dead, by inattentive observers. When BRUHIER wrote, the danger of suppressing the faint signs of remaining life was encreased, by the horrible practice of stopping up the mouth, nostrils, ears, and other passages, immediately after the supposed decease of the patient.

If we can depend on the facts related by this author, of the interment of persons within twelve hours, after strong accessions of epilepsy or apoplexy, we may, indeed, admit the dreadful possibility, of their being buried in a state not destitute of consciousness, though deprived of all power of expressing it.

According to BRUHIER, the rituals which were most cautiously drawn up, only enjoined the delay of interment for twenty-four hours after death, but others directed it to be performed within half of that

that period. He mentions a shocking instance of the abuse of the power thus confided to individuals, which, I hope, could hardly be parallelled, under all the carelessness on the subject of interment, which seems to have existed at that time in France.

A provincial notary, who had a lawsuit with his vicar, was seized with an epileptic fit, so severe, that the attendants thought him dead. The vicar took care to bury his antagonist, at the expiration of twelve hours. Next day, a person who had occasion to go into the church, heard a great noise, proceeding from the grave of this unfortunate man; he gave immediate notice of it to the clergyman, who desired him to say nothing about it. The family, however, were informed of this circumstance, and obtained permission to take up the body; it was found lifeless, but marks of struggling were perceived on the hands.*

Happily,

* De l'Incertitude des Signes de la Mort, tom. i. p. 168.

Happily, the usage of keeping the body unburied during several days, is so firmly established in this country, that it is unnecessary to speculate on the possibility of such abuses. The slightest appearance of beginning putrefaction, affords sufficient security against any revisitings of life, and marks of this nature are almost always visible, before the date of interment observed here.

APPENDIX.

In the paper subjoined, No. I, are contained some rules for the preservation of the poor from contagious fevers, which were originally drawn up, for the purpose of being distributed by the Board of Health. Circumstances, which it would be uninteresting to mention, prevented its publication through that channel, and I insert it in this place, because it contains observations, which may be found useful, in other manufacturing towns. I have accommodated the language, to the persons for whose benefit it was designed.

In No. II, are to be found some observations, with which Mr. Simmons *has favoured me, on subjects treated in the present volume.*

APPENDIX.

No. I.

ADVICE TO THE POOR.

You are requested to read the following paper with attention, by persons who are endeavouring to relieve you from the misery and fatality of fevers, and other infectious diseases. A great deal has been done by the establishment of the fever-wards, the good effects of which you daily experience; but much depends upon your own conduct, for preventing the first occasions of sickness. We can only stop the progress of diseases after they have once begun, but it is greatly in your power to prevent them from beginning at all, by attending

ing to the simple directions which follow.

Avoid living in damp cellars: they destroy your constitutions, and shorten your lives. No temptation of low rents can counterbalance their ill effects. You are apt to croud into the cellars of new buildings, supposing them to be clean. This is a fatal mistake. A new house is always damp for two years, and the cellars, which you inhabit under them, are generally as moist as the bottom of a well. In such places, you are liable to bad fevers, which often throw the patient into a decline, and you are apt to get rheumatic complaints, that continue for a long time, and disable you from working.

If you cannot help taking a cellar, be attentive to have all the windows put in good repair, before you venture into it, and, if possible, get it whitewashed. If you attempt to live in a cellar with broken

broken windows, colds and fevers will be the certain consequences.

In many parts of the town, you sleep in back-rooms, behind the front-cellar, which are dark, and have no proper circulation of air. It would be much more healthy to sleep to the front: at least, when you have large families, which is often the case, you ought to divide them, and not to croud the whole together in the back-cellar.

Keep your persons and houses as clean as your employments will permit, and do not regret the loss of an hour's wages, when your time is occupied in attending to cleanliness. It is better to give up a little time occasionally, to keep your houses neat, than to see your whole family lying sick, in consequence of working constantly, without cleaning. It would be of great service, if you could contrive to air your beds and bed-clothes out of doors, once or twice a-week.

Always

Always wash your children from head to foot with cold water, before you send them to work in the morning. Take care to keep them dry in their feet, and never allow them to go to work without giving them their breakfast, though you should have nothing to offer them but a crust of bread, and a little water. Children who get wet feet, when they go out early fasting, seldom escape fevers, or severe colds.

If you know that any of your neighbours are in a starving condition, apply to some opulent persons in the neighbourhood; get them recommended to the overseer; or, if they are sick, to the Infirmary. Want of necessary food produces bad fevers; and many of you may suffer from neglecting poor, distressed persons, whom timely relief would have preserved from the disease.

When you know, or have reason to believe that any of your neighbours are afflicted with fevers, and that they have not

not taken care to procure the assistance afforded by the Infirmary, you ought, both from a regard to them and to yourselves, to give immediate information to the physicians, or some trustee of the Infirmary, or to Mr. Bellott, Secretary to the Board of Health. The Board allows the sum of two shillings, for every well-founded information of this kind.

You ought to be very cautious in purchasing old clothes, or second-hand furniture; as they may be brought from houses infected with fever, and you may introduce the infection with them, into your own dwellings. Every article of this kind ought to be stoved or ventilated, before it is admitted into your houses.

Your sick neighbours, when the fever gets into their houses, may often require assistance from you. It would be cruel to refuse them, yet it is hard that you should be obliged to expose your health

health, and that of your family. You ought never to visit them from idle curiosity. But when they require your help in making their beds, washing, or turning the sick, you may preserve yourselves from being infected, by tying a handkerchief across your face, just below the eyes, to prevent the exhalations from the bodies of the sick from entering your mouth and nostrils. As soon as you return to your own house, wash your hands and face in cold water, and avoid touching any of your family, for half, or three quarters of an hour.

Your health will always be materially injured by the following circumatances; living in small back buildings, adjoining to the open vaults of privies; living in cellars, where the streets are not properly soughed, or drained: living in narrow bye streets, where sheep are slaughtered, and where the blood and garbage are allowed to stagnate and corrupt; and, perhaps, more than all, by

by living crouded together, in dirty lodging-houses, where you cannot have the common comforts of light and air.

It should be unnecessary to remind you, that much sickness is occasioned among you, by passing your evenings at alehouses, or in strolling about the streets, or in the fields adjoining to the town. Perhaps those who are most apt to expose themselves in this manner, would pay little attention to dissuasive arguments of any kind. However, those who feel an interest in your welfare, cannot omit making the remark.

There is another subject of great importance to you, on which you seem to want information. A great number of children die of the natural small-pox, almost every year. This mortality must be imputed, in a great degree, to your own negligence; for the faculty at the Infirmary offer to inoculate your children, and give public notice of the proper time for making your application, twice a-year.

year. The next period for inoculation will be in March; the succeeding period in September. The chance of recovery from the small-pox received by inoculation, is so much greater than the chance of recovery from the natural kind, that you ought to consider yourselves as performing a duty to your children, and to the public, in bringing those who have not yet had the small-pox, to be inoculated at the Infirmary.

You ought to be informed, that there is scarcely any thing more injurious to the health of children, than allowing them to work at night in the cotton-mills. It may not always be in your power to prevent their being employed in this manner, but you should be made acquainted with the danger to which you expose them. There is no hazard incurred by their working during the day, in clean, well-managed cotton-mills.

It is also proper to inform you, that you

you may be infected with fevers, by working in the same place with persons who have just recovered from fevers, or by people who come from infected houses, where they are at no pains to keep themselves clean. It is a fact well-known to this Board, that infectious fevers have been conveyed from Manchester to neighbouring towns, and cotton-mills, by persons going from infected houses. You had better collect something among yourselves, to support such persons for a fortnight after their recovery, than expose yourselves to the risk of catching a fever, by their returning too early to work.

People who are discharged from the fever-ward, bring no infection out with them; their clothes being aired and cleaned, during their stay in the House of Recovery.

No. II.

TO DR. FERRIAR.

Dear Sir,

If the following communications, on professional subjects, shall be deemed worthy of your notice, they are entirely at your disposal, and I shall feel gratified, in their being laid before the public, under the sanction of your name. I am, dear Sir,

your sincere and faithful servant,

WM. SIMMONS.

Manchester,
Feb. 10th, 1798.

ON THE USE OF THE KALI PURUM, AS A CAUSTIC IN HYDROPHOBIA.

In the debate on the dog-tax, in the House of Commons, in the year 1796, an honourable member (Mr. Dent) mentioned, that forty cases of hydrophobia had occurred at the Manchester Infirmary,

mary, within a fortnight; and it has been since observed in some of the periodical publications, that such a number of cases must furnish practical inferences decisive of some mode of treatment. Happily, however, for the individuals, not one case of hydrophobia occurred at the time alluded to, but a considerable number, probably upwards of forty, applied at the Infirmary, who had been bitten by mad-dogs—nine of which offered themselves one morning, on my out-patient day. As they all escaped the disease, the means of prevention used may not be uninteresting to medical readers, which consisted simply in the application of the *kali purum* to the wounded parts, and, by way of seeming to do something, the Ormskirk medicine was given, in conformity to custom, to those whose prejudices led them to expect it. For twenty years I have myself had experience of the success attendant on applying this caustic, in wounds inflicted by the bite of mad animals, or of animals supposed to be mad, and

and in no one instance has hydrophobia followed its use. It has, I am informed, been used at our Infirmary ever since its foundation, now near fifty years, with uniform success. Many remedies have been cried up as specific, in preventing and in curing this disease, but their inefficacy is too clearly evinced, in its appearing after they have been attentively administered. Excision, the actual and potential cautery, have been known to fail, and no reliance is now placed on the Tonquin, the Ormskirk, or on any other remedy.

Although the disease would not have appeared, in many of the instances in which the kali purum was employed, it is highly probable that it would have shewn itself in some of them, for it can scarcely be conceived, that the poison should escape being infused in such a multiplicity of instances. Excision is now recommended as the chief means of prevention, and when practicable should be duly enforced; its effect, however,

however, will be secured, by touching the surface of the incised part with the kali purum. In superficial and in deep wounds, I have never known it disappoint the expectation of the practitioner, and it may therefore be applied alone, or jointly with other means, observing only to induce a slough proportioned to the depth and extent of the wound, so as to leave no doubt of having penetrated to the very bottom.

ON THE USE OF NITRIC ACID, IN THE LUES VENEREA.

CASE I.

Mr. —— ——requested me to visit his man-servant, on Friday evening the 4th of November, 1797. I found him complaining of a small chancre, situated on the

the upper part of the prepuce, and in considerable pain, from a bubo in the right groin, in a state of suppuration. I directed him an opening medicine, to be taken in the morning, to apply a common poultice to the bubo, twice a-day, and to keep quiet.

Nov. 26, Suppuration is considerably advanced, and he is freer from pain.

One drachm of the *nitric* acid, diluted in a quart of water, and rendered palatable with sugar, was directed to be taken daily.

Nov. 27, Felt heated last night from the medicine—tongue moist—pulse natural.

Nov. 29, Chancre cleaner—the acid has produced no sensible effect. A caustic was applied to the bubo.

Dec. 1, The chancre looks clean, and

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is healing—ordered to increase the acid to one drachm and a half, daily.

Dec. 5, Chancre healing—bubo foul —increase the acid to two drachms, daily.

Dec. 7, He took the acid yesterday, as prescribed on the 5th—perspired much last night—chancre nearly healed —the bubo discharges good matter.

Dec. 11, Chancre healed—the bubo looks clean.

Dec. 20, Edges of the bubo indurated and inverted.

Two drachms and a half of acid were directed to be taken daily, and the ulcer was dressed with adhesive plasters.

Dec. 27, Ulcer much diminished in size, and the induration gone. For two days past, he has taken three drachms of the acid in a day, yet his gums are free

from soreness, and he now goes about his business as usual.

Jan. 10, 1798, He has taken three drachms daily, since the last report—bubo nearly healed. A hoarseness, and slight cough have been troublesome, for the last ten days, and the hoarseness continues increasing—there is a particular circumscribed redness in his cheeks, but no soreness in his throat or gums.

Ordered to discontinue the acid.

During the whole time, he took the diluted acid through a quill, and it was measured out to him daily in a graduated glass measure.

No application whatever was used to the chancre, and only dry lint to the ulcer of the bubo, previous to the adhesive plasters.

CASE II.

Mr. —— ——'s man-servant has been afflicted

afflicted with a venereal complaint for some time. The present symptoms are, nocturnal pains—extensive ulcers in the tonsils—eruptions on the forehead, and hairy scalp, and an abscess on the right side of the scrotum, affecting the testicle on that side.

I directed him to take the muriated mercury, and to suspend the scrotum in a bag-truss. On the disappearance of the symptoms, he left off the medicine; the former consequently returned, after a short interval, and he has now ulcers in his tonsils, and a discharge of matter from the scrotum.

Nov. 29, I directed sixty drops of the *nitric* acid, diluted in a quart of water, with some sugar, to be taken daily.

Dec. 4, Throat better—complains of great tenderness in his teeth and gums, but there is no visible inflammation in the latter. Ordered to take the medicine through a quill.

Dec.

Dec. 7, Throat better—no complaint in the mouth—pains abated.

Dec. 14, Throat the same—two days ago, the eruption re-appeared on his head and forehead. Increase the acid to eighty drops daily.

Dec. 29, Eighty drops made his throat so painful, that he was obliged to lessen the dose to sixty. The tonsils are now healed, but an ulcer has appeared in the angle, at the base of the uvula, on the left side—the eruption on the forehead is very itchy, but less vivid —that on the scalp better. Let sixty drops be taken daily.

Jan. 10, 1798, Tonsils healed, but the new ulcer extends rapidly—eruption less vivid.—Again increase the dose to eighty drops in a day.

Jan. 16, Ulcer increasing—eruptions as vivid as at any former period—complains of pain in his throat, and of the return

return of the nocturnal pains, which had ceased—his countenance also looks heavy and oppressed, exhibiting the same appearance as when he first applied to me—scrotum very little troublesome. —He cannot take more than sixty drops in a day.

Discontinue the nitric acid, and again have recourse to mercury.

The first case shews, that the *nitric* acid will cure the primary symptoms of lues venerea, and the second proves, that though it is capable of relieving ulcers of the tonsils, by its direct action, yet it fails in permanently removing secondary symptoms, whatever temporary relief it may afford, in such doses as can be taken, when there are ulcers in the throat. I have given the common nitrous acid of the shops, in this disease, under a variety of circumstances, and in primary and secondary symptoms: the result corresponds with the above recited cases.

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It requires neither confinement, particular mode of diet, nor hindrance of business. Whether the hoarseness, in the first case, was owing to the acid, I cannot determine; probably a much larger dose was given than is absolutely necessary in primary symptoms, but I was desirous to know to what extent it might be administered, as it was then measured with precision, and taken with the utmost regularity. When not sufficiently diluted, it has excited vomiting, and pain in the stomach. It would appear, that the affection of the gums, and consequent salivation, is owing solely to its direct action on them, and may be avoided by sucking it through a quill, straw, or glass tube.

Although it has failed me in secondary symptoms, when the constitution has been much exhausted by previous disease, and a long course of mercury, it has had a speedy and permanent effect in restoring the health and strength. Under circumstances where a mercurial course

course cannot be entered on, it arrests the progress of the disease. An example of this may be taken from a person labouring under lues venerea, being seized with typhus—the venereal action is suspended during the fever, and is again renewed on its termination; in this case, mercury must be of doubtful propriety: the acid, however, will not only relieve the venereal affection, but restore the patient's strength, and coincides admirably with any tonic plan, that may be adopted.

In ulcers, remaining after a mercurial course, and which, though for a time relieved, are aggravated by the further use of mercury, I have derived much benefit from it.

Such is the result of my present experience of this remedy. I am little solicitous to know how the salutary changes are induced, and cannot at present acquiesce in the doctrine of oxygenation of the fluids, either by means of the nitric

tric acid, or of mercury; and it must be admitted, that opium, laurel-water, and other powerful narcotics, do not act by any known elective attraction.

FINIS.